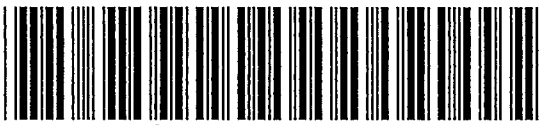
*372IHSSF259*



DocumentID NONCD0002795

Site Name RD PATE ESTATE

DocumentType Correspondence (C)

RptSegment 1

DocDate 5/20/2011

DocRcvd 5/20/2011

Box SF259

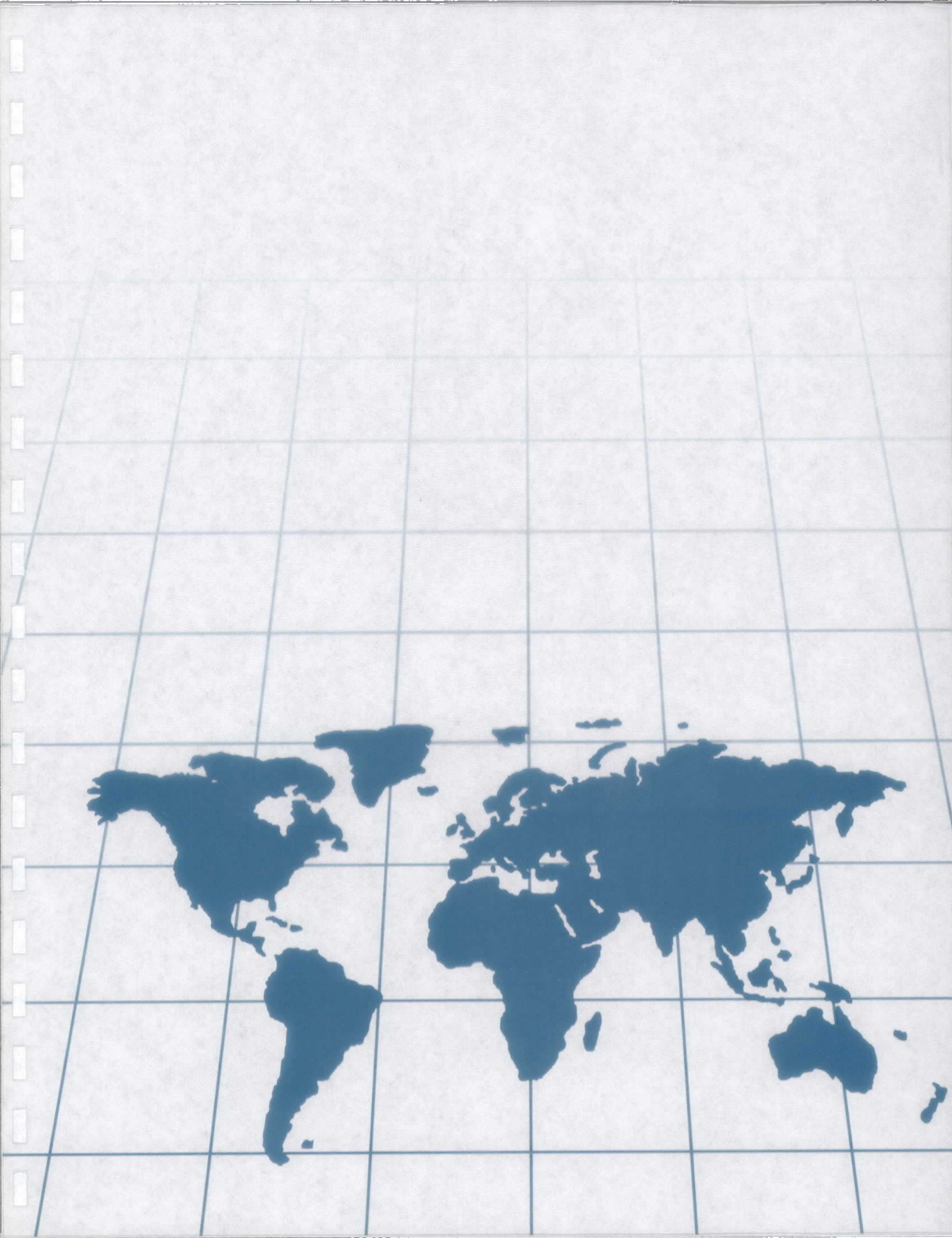
AccessLevel PUBLIC

Division WASTE MANAGEMENT

Section SUPERFUND

Program IHS (IHS)

DocCat FACILITY



REC-LEAD

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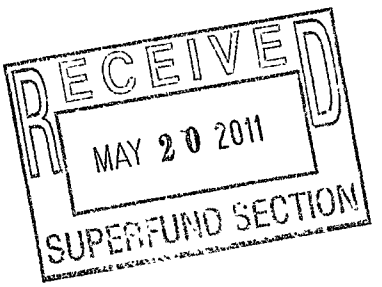
May 9, 2011




NCDENR
Division of Waste Management
Inactive Hazardous Sites Branch
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605
(919) 508-8400

Attention: Ms. Janet McDonald
REC Program

Reference: Quarterly Progress Report - REC Administrative Agreement
**R. D. Pate Estate**
101 East Main Street
Pikeville, Wayne County, North Carolina
**SITE ID: NONCD0002795**
EA Project No. 07-7019.3

Dear Ms. McDonald:

On behalf of BB&T, EnviroAssessments (EA) is providing this Quarterly Progress Report for the referenced site. The subject site is owned by Richard David Pate and consists of approximately 0.12 acres. The Project is located in an urban area at 101 East Main Street in Pikeville, Wayne County, North Carolina. The property contains one approximately 3,397 square foot one-story building constructed in phases throughout the 1940s and 1950s. Historically, the Project operated as an automotive repair facility and service station from the late 1940s to 1992. The building most recently operated as an automotive and equipment repair facility known as Historic Sites Maintenance Shop - North Carolina Department of Cultural Resources. The Project is serviced by municipal water and sewer services. The facility is not currently in operation and the site is currently unoccupied. The remainder of the property is utilized as a gravel parking area.

On June 11, 2008, EA entered into an Administrative Agreement with Ms. Pamela Watson, Branch Banking and Trust Company, Executor and Trustee for the R.D. Pate Family Trust to enter into the Registered Environmental Consultant (REC) Program under the direction of the NCDENR IHSB pursuant the Inactive Hazardous Sites Act of 1987 (N.C.G.S. 130A-310 *et seq.*).

**Remedial Investigation Workplan/Background**

As part of the REC program requirements, a Remedial Investigation (RI) Workplan, dated March 2010, was prepared and submitted to the IHSB that describes the approach and methods to be used to assess environmental contamination at the R. D. Pate Estate site. The objective of the investigation includes

assessing areas of the site that may pose a potential threat to human health and the environment. Assessment activities include data gathering and analysis to evaluate the nature and general extent of contaminants of concern (COC) at the site. The data must be of sufficient quality and quantity to support subsequent site-related activities (e.g., risk assessment/evaluation, feasibility studies, etc.). The RI Workplan summarized the results of previous assessments at the site and describes the tasks necessary to assess the identified areas of potential concern. Also included as part of the Workplan are a Field Sampling and Analysis Plan, a Quality Assurance Project Plan, and a Site Health and Safety Plan.

Previous assessment activities at the site have identified soil and groundwater impact from volatile organic compounds (VOCs). Potential sources of soil and groundwater impact at the Project are a former on-site UST system (previously addressed closure through the NCDENR UST Division) and solvents used at the site during its operation as an automotive repair facility (subject of this investigation).

Based on previous assessments in 2007/2008 (22 shallow soil sample locations, 7 shallow groundwater monitoring wells, and one (1) deep vertical extent Type III well) the source of the chlorinated solvent-related compounds (TCE and 1,1,2,2-Tetrachloroethane) appeared to be the area of the site located between the garage doors and the former UST basin. The lateral extents of the chlorinated solvent contamination plumes in groundwater have not been defined in the down-gradient direction and the extent of impact to off-site properties has not been determined. The RI Workplan defined specific Areas of Potential Concern (AOPC) identified at the site to be assessed as follows:

- **AOPC # 1 – Automobile Service Area**

  One (1) soil sample was collected from this area in June 2008 (SB-1-1) and revealed a 1,1,2,2-Tetrachloroethane concentration of 0.00327 mg/kg, which exceeded its Soil Remediation Goal (SRG) for Human Health and Groundwater (0.0012 mg/kg).

- **AOPC # 2 – Grease Trap Area**

  Three (3) soil samples were collected from this area in June 2008 (SB-7-1 through SB-9-1), all of which revealed 1,1,2,2-Tetrachloroethane concentrations which exceeded the Soil Remediation Goal (SRG) for Human Health and Groundwater (0.0012 mg/kg).

- **Other Areas**

  Monitoring wells MW-1 and MW-2, along the western boundary of the site, were the only wells to reveal concentrations of solvent-related compounds. Monitoring well MW-1 revealed a 1,1,2,2-Tetrachloroethane concentration of 9.78 ug/L, which exceeds its respective Groundwater Remediation Goal of 0.2 ug/L. MW-1 also revealed a Trichloroethene concentration of 2.71 ug/L, which does not exceed the Groundwater Remediation Goal of 3 ug/L. Laboratory analysis of MW-2 revealed a minor concentration of cis-1,2 Dichloroethene (21 ug/L), which did not exceed its respective Groundwater Remediation Goal of 70 ug/L. In order to thoroughly delineate groundwater contamination on-site, the RI Workplan proposed groundwater sampling in on-site and off-site areas not previously investigated in great detail. In addition, historical groundwater data indicates that solvent-related compounds west of MW-1 and southwest of MW-2 require further delineation.

**Recent Remedial Investigation Activities**

In March and April 2011, EA conducted Remedial Investigation activities at the site to further evaluate the nature, extent and magnitude of contamination identified in prior assessments. The activities involved detailed underground utility locating/mapping, the installation 6 (six) additional groundwater monitoring wells, collection of 16 additional soil samples in the suspected areas of concern, low-flow groundwater sampling of all existing and recently installed monitoring wells, and State of North Carolina licensed surveyor used to survey soil sample and monitoring well locations and elevations and other pertinent site features. All soil and groundwater samples were analyzed for the 13 priority pollutant metals by EPA methods 6010/7471; semi-volatiles organic compounds (SVOCs) by method 8270 and volatile organic compounds (VOCs) by method 8260.

Groundwater Assessment

Five intermediate depth groundwater monitoring wells installed to a depth of 28 feet (MW-8 through MW-11 and MW-13) and one additional shallow monitoring well installed to 14 feet (MW-12) were completed in March/April 2011. The locations of the wells are presented on DRAFT **Figure 3** and DRAFT **Isoconcentration Maps** are attached. The additional wells were installed to better define lateral and vertical extent of the solvent contaminant plume and in assumed upgradient and downgradient locations. The depth to the unconfined water table ranged from approximately 2.5 to 4.5 feet below ground surface.

Two groundwater monitoring wells (MW-11 and MW-12) were installed off-site and further downgradient of MW-1 and MW-2 in an attempt to define the lateral and vertical limits of the contaminant plume. However, both of these new off-site and downgradient wells revealed that the solvent contamination plume above 2L Standards extends off-site and farther laterally and vertically to the west and southwest. In addition, the 1,1,2,2-Tetrachlroethane concentration in groundwater sample from intermediate well MW-11 exceeded Gross Contamination Levels (GCLs).

Upgradient intermediate well MW-9 on the eastern property boundary revealed one solvent compound above 2L Standards. Solvent contamination was not detected in shallow upgradient monitoring wells MW-4 and MW-7. Solvent contamination was not detected in deep Type III monitoring well DW-2 located near and/or south of the suspected source area (AOPC #2) in a downgradient to cross-gradient location.

Note: Benzene and/or other petroleum-related compounds were detected above 2L Standards in monitoring wells MW-2, MW-3 and MW-6 during March/April 2011, at lower concentrations compared to June 2008. Also, Benzene was detected above 2L Standards in new monitoring wells MW-8, MW-9 and off-site well MW-12 during March/April 2011. However, the petroleum contamination incident was issued a *Notice of No Further Action* by the DWM on January 7, 2008, and is not being addressed as part of this Remedial Investigation.

Soil Assessment

In March 2011, 16 additional soil borings were advanced at the site to assess subsurface conditions in areas of concern not previously investigated, and to better define conditions in those areas previously investigated (**Figure 4** from RI Workplan). Soil borings were advanced to depths of approximately 12 to 16 inches below

grade due to the shallow depth to groundwater of approximately 2.5 to 4.5 feet below ground surface. Draft **Soil Isoconcentration Maps** are attached for reference.

Six additional soil samples were collected in/near AOPC #1. Only one of the soil samples revealed solvent contamination (1,1,2,2-Tetrachloroethane) which exceeded its Protection of Groundwater SRG. In addition, some metals concentrations exceeded the Protection of Health and/or Groundwater SRGs in this area. The extent of solvent-related soil contamination in AOPC #1 appears to be defined and limited in extent to the subject site.

Seven additional soil samples were collected in/near AOPC #2. Three of the soil samples revealed solvent contamination concentrations similar to June 2008 (1,1,2,2-Tetrachloroethane), in addition to TCE in two samples, which exceeded Protection of Groundwater SRGs. In addition, some metals concentrations exceeded the Protection of Health and/or Groundwater SRGs in this area. The extent of solvent-related soil contamination in AOPC #2 appears to be mostly defined, except it may extend laterally to the north and onto the adjacent property.

Preliminary Conclusions

Based on the March/April 2011 groundwater sampling results, several on-site and off-site monitoring wells exhibited chlorinated solvent concentrations that exceeded 15A NCAC 2L groundwater standards. The lateral and vertical extent of the solvent-related contaminant plume has not been fully defined and appears to extend further off-site in a general downgradient direction to the west and southwest of the suspected primary source area (AOPC #2). The downgradient migration of solvent (and petroleum) contaminants may also be influenced by underground utility pathways that are documented to the west and southwest and connected to the suspected primary source area. The extent of solvent contaminated soil appears to be reasonably well defined and may not require further soil sampling.

Therefore, the lateral and vertical extent of the solvent contaminated groundwater plume will need to be further delineated in a subsequent phase of monitoring well installations, groundwater sampling and analysis. The additional phase of Remedial Investigation is required in order to fully define the extent of contamination, and to collect the information necessary for remedial action planning, including the feasibility study and remedial design, if appropriate.

On behalf of BB&T, we appreciate your assistance on this project. Please call the undersigned at (980) 722-3901 if you have any questions or require any additional information.

Sincerely,

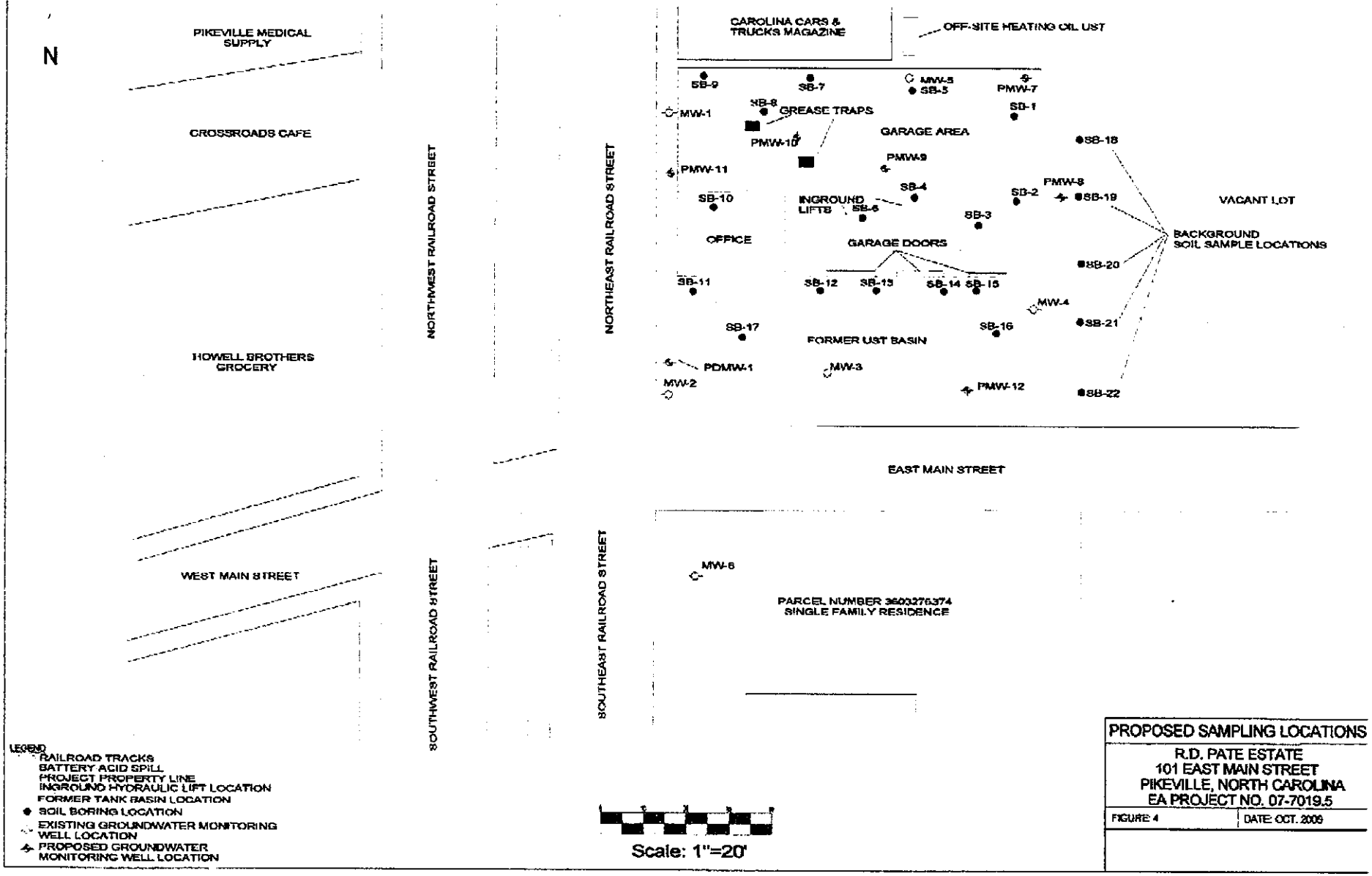
**EnviroAssessments**

Gary K. Sawyer, PG, RSM
Principal

NORTH CAROLINA LICENSED SEAL 1337 GEOLOGIST GARY K. SAWYER

CC: Ms. Cindi Lewis – BB&T

Attachments




**PROPOSED SAMPLING LOCATIONS**

R.D. PATE ESTATE
101 EAST MAIN STREET
PIKEVILLE, NORTH CAROLINA
EA PROJECT NO. 07-7019.5

| FIGURE 4 | DATE: OCT. 2009 |
|---|---|

# SITE PLAN - OVERVIEW

R. D. PATE ESTATE
101 EAST MAIN STREET
PIKEVILLE, NORTH CAROLINA
EA PROJECT NO. 07-7019.6

FIGURE: 2 | DATE: APRIL 2011

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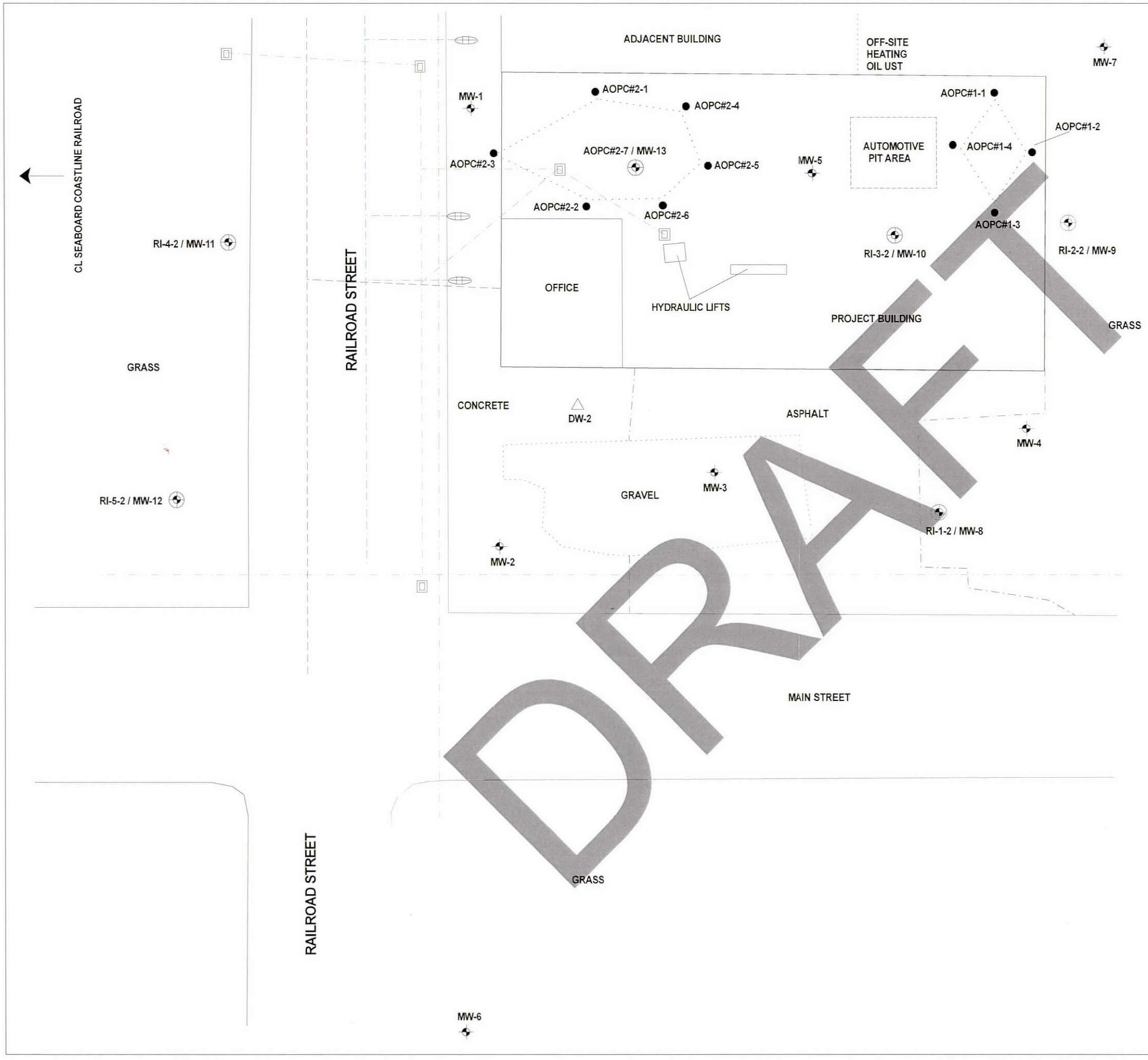




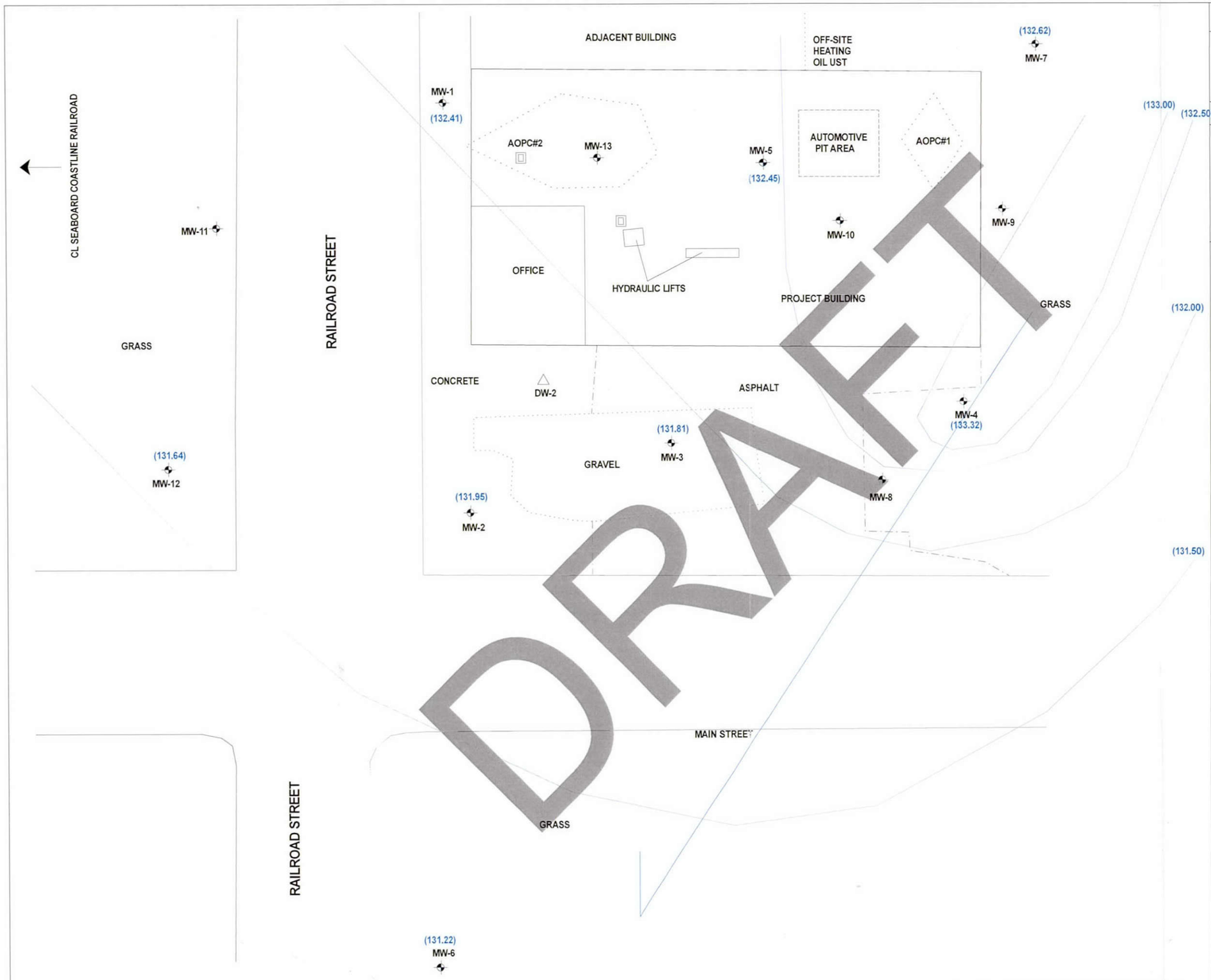

## LEGEND

- TYPE II GROUNDWATER MONITORING WELL LOCATION
- TYPE III GROUNDWATER MONITORING WELL LOCATION
- SOIL SAMPLE LOCATION
- TYPE II MONITORING WELL AND SOIL SAMPLE (2011) LOCATION
- OVERHEAD ELECTRICAL LINES
- MUNICIPAL WATER LINE
- MUNICIPAL STORM SEWER LINE
- MUNICIPAL SANITARY SEWER LINE
- DRAIN
- WATER METER

N

0 10 20

Scale: 1"=10'




SHALLOW GROUNDWATER POTENTIOMETRIC MAP

R.D. PATE ESTATE
101 EAST MAIN STREET
PIKEVILLE, WAYNE COUNTY, NORTH CAROLINA
EA PROJECT NO. 07-7019.6

FIGURE: 2 | DATE: APRIL 2011

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## LEGEND

- TYPE II GROUNDWATER MONITORING WELL LOCATION
- TYPE III GROUNDWATER MONITORING WELL LOCATION
- SOIL SAMPLE LOCATION
- TYPE II MONITORING WELL AND SOIL SAMPLE (2011) LOCATION
- DRAIN
- GROUNDWATER CONTOUR LINE
- GROUNDWATER FLOW DIRECTION

N

0 10 20

Scale: 1"=10'

# SHALLOW TRICHLOROETHENE (TCE) GROUNWATER ISOCONCENTRATION MAP (APRIL 2011)

R.D. PATE ESTATE
101 EAST MAIN STREET
PIKEVILLE, WAYNE COUNTY, NORTH CAROLINA
EA PROJECT NO. 07-7019.6

FIGURE: 2 | DATE: APRIL 2011

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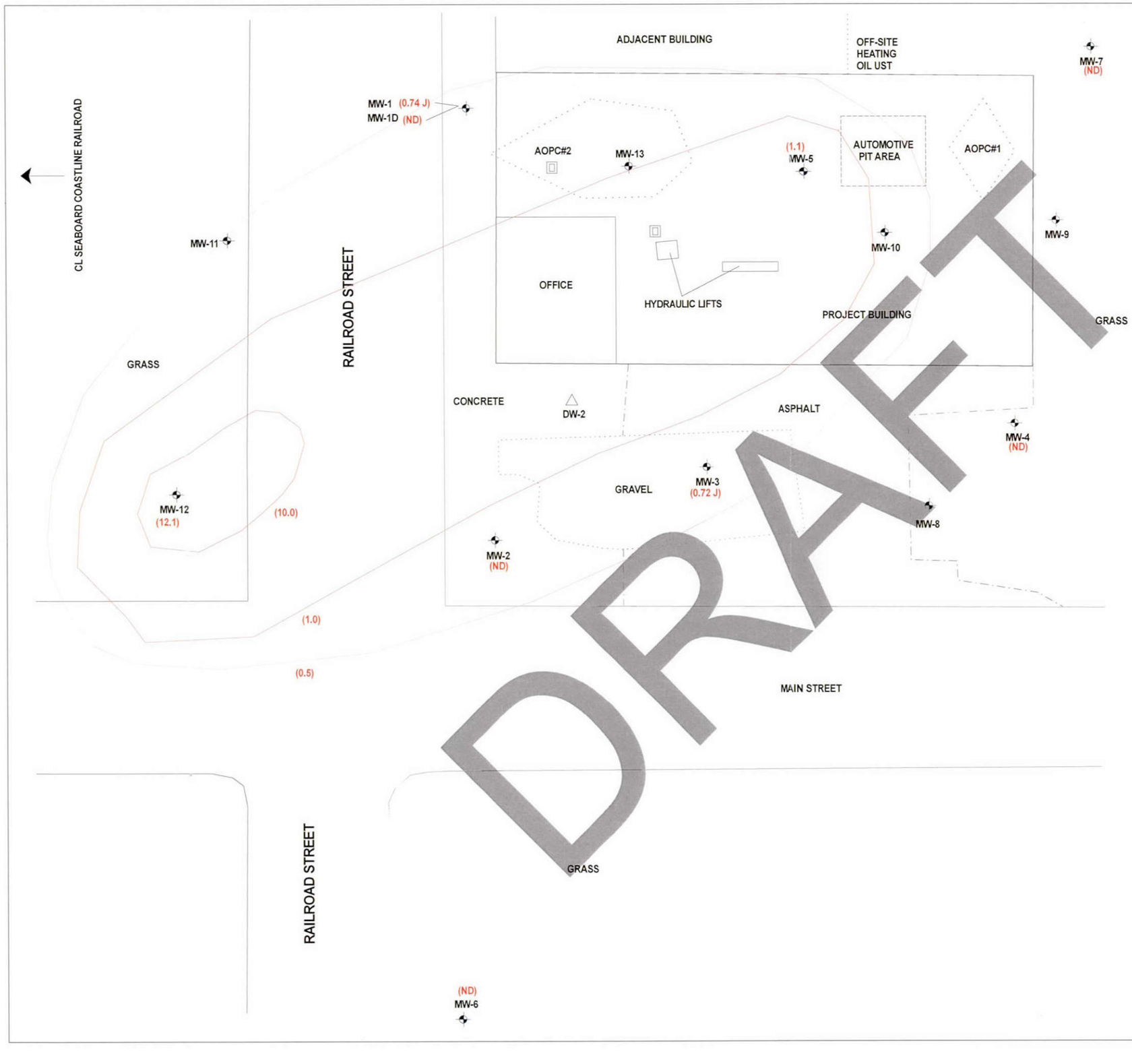




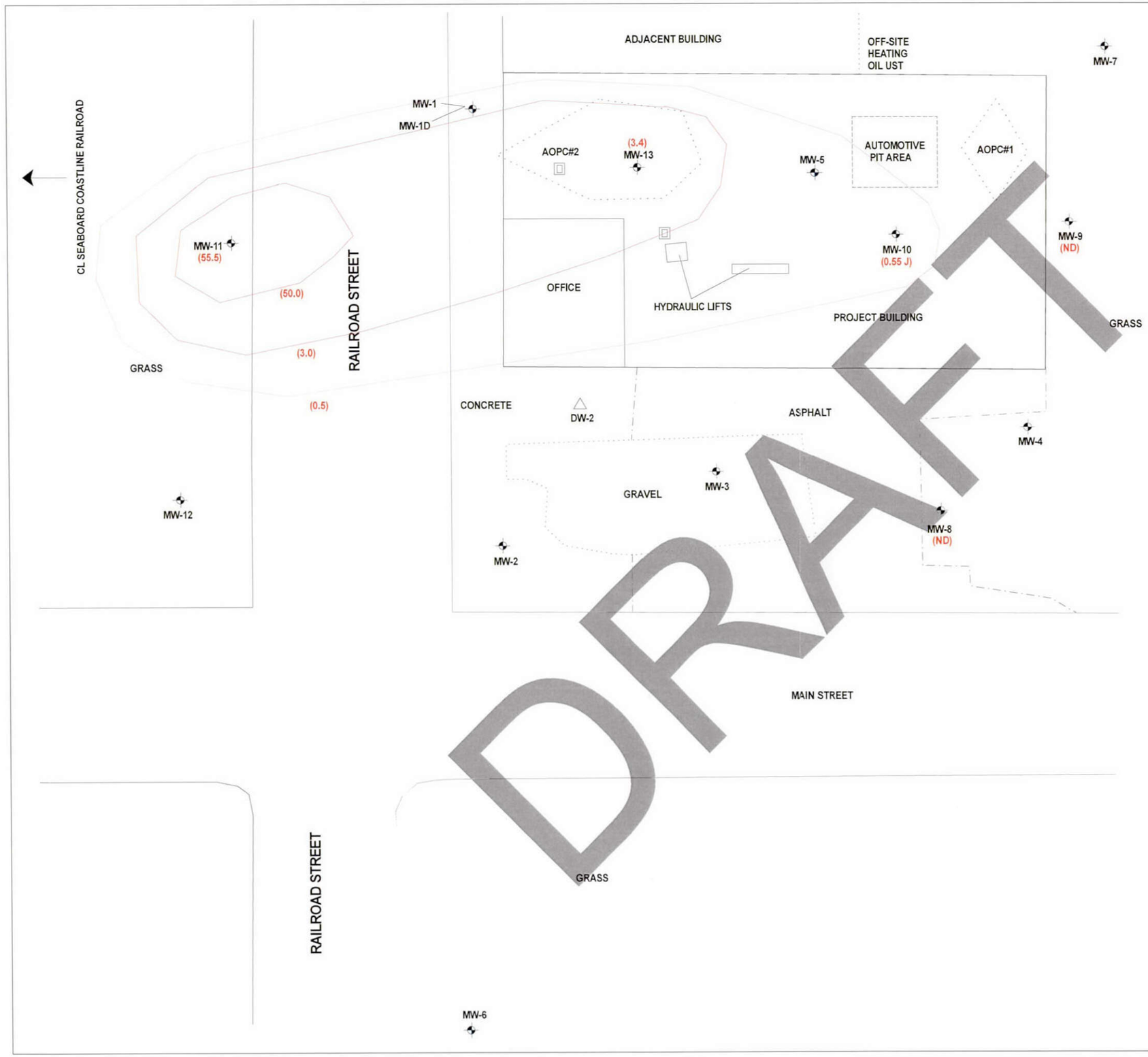

## LEGEND

- TYPE II GROUNDWATER MONITORING WELL LOCATION
- TYPE III GROUNDWATER MONITORING WELL LOCATION
- SOIL SAMPLE LOCATION
- TYPE II MONITORING WELL AND SOIL SAMPLE (2011) LOCATION
- DRAIN
- TRICHLOROETHENE (TCE) CONTOUR LINE

N

0 10 20

Scale: 1"=10'






INTERMEDIATE TRICHLOROETHENE (TCE)
GROUNWATER ISOCONCENTRATION MAP (APRIL 2011)

R.D. PATE ESTATE
101 EAST MAIN STREET
PIKEVILLE, WAYNE COUNTY, NORTH CAROLINA
EA PROJECT NO. 07-7019.6

| FIGURE: 2 | DATE: APRIL 2011 |
|---|---|

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## LEGEND

- TYPE II GROUNDWATER MONITORING WELL LOCATION
- TYPE III GROUNDWATER MONITORING WELL LOCATION
- SOIL SAMPLE LOCATION
- TYPE II MONITORING WELL AND SOIL SAMPLE (2011) LOCATION
- DRAIN
- TRICHLOROETHENE (TCE) CONTOUR LINE

N

0 10 20

Scale: 1"=10'

SHALLOW 1,1,2,2-TETRACHLOROETHANE
GROUNDWATER ISOCONCENTRATION MAP (APRIL 2011)

R.D. PATE ESTATE
101 EAST MAIN STREET
PIKEVILLE, WAYNE COUNTY, NORTH CAROLINA
EA PROJECT NO. 07-7019.6

FIGURE: 2 | DATE: APRIL 2011

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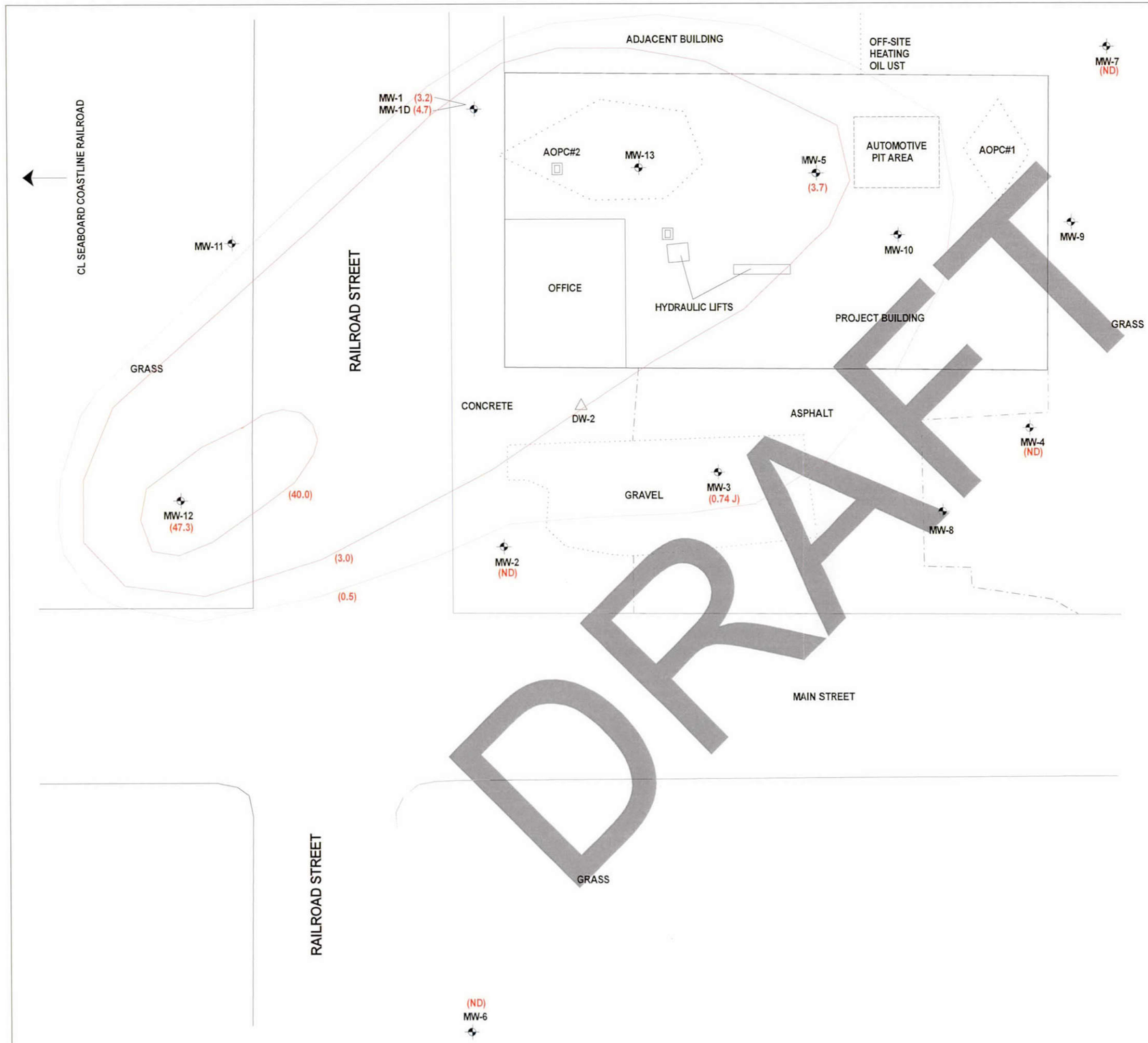




## LEGEND

- TYPE II GROUNDWATER MONITORING WELL LOCATION
- TYPE III GROUNDWATER MONITORING WELL LOCATION
- SOIL SAMPLE LOCATION
- TYPE II MONITORING WELL AND SOIL SAMPLE (2011) LOCATION
- DRAIN
- 1,1,2,2-TETRACHLOROETHANE CONTOUR LINE

N

0 10 20

Scale: 1"=10'

INTERMEDIATE 1,1,2,2-TETRACHLOROETHANE
GROUNDWATER ISOCONCENTRATION MAP (APRIL 2011)

R.D. PATE ESTATE
101 EAST MAIN STREET
PIKEVILLE, WAYNE COUNTY, NORTH CAROLINA
EA PROJECT NO. 07-7019.6

FIGURE: 2 | DATE: APRIL 2011

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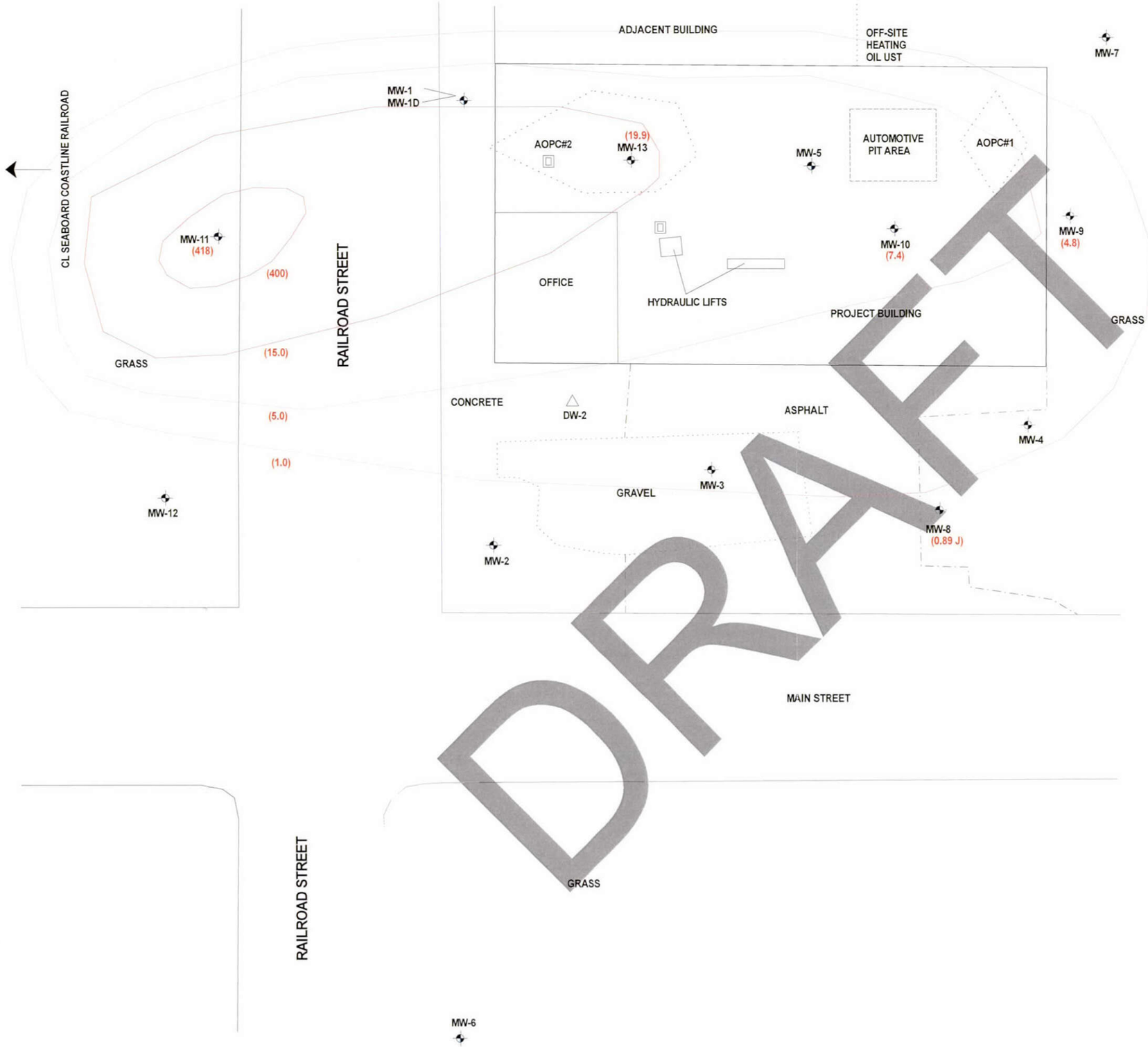




## LEGEND

- TYPE II GROUNDWATER MONITORING WELL LOCATION
- TYPE III GROUNDWATER MONITORING WELL LOCATION
- SOIL SAMPLE LOCATION
- TYPE II MONITORING WELL AND SOIL SAMPLE (2011) LOCATION
- DRAIN
- 1,1,2,2-TETRACHLOROETHANE CONTOUR LINE

N

0 10 20

Scale: 1"=10'

TRICHLOROETHENE (TCE)
SOIL ISOCONCENTRATION MAP (APRIL 2011)

# R. D. PATE ESTATE
# 101 EAST MAIN STREET
# PIKEVILLE, NORTH CAROLINA
# EA PROJECT NO. 07-7019.6

FIGURE: 2 | DATE: APRIL 2011

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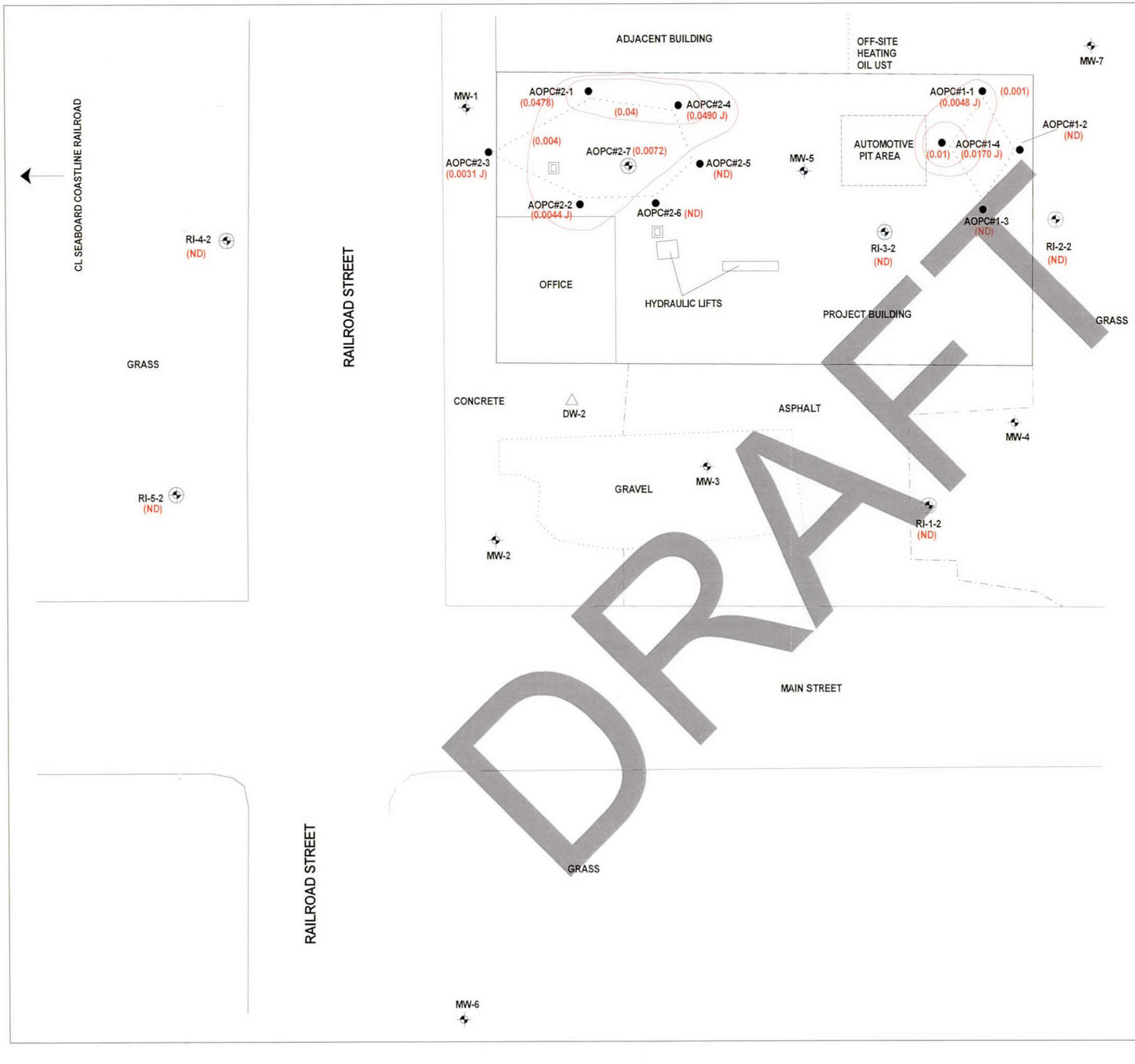


## LEGEND

- TYPE II GROUNDWATER MONITORING WELL LOCATION
- TYPE III GROUNDWATER MONITORING WELL LOCATION
- SOIL SAMPLE LOCATION
- TYPE II MONITORING WELL AND SOIL SAMPLE (2011) LOCATION
- DRAIN
- TRICHLOROETHENE (TCE) COUNTOUR LINE

N

0 10 20

Scale: 1"=10'

1,1,2,2-TETRACHLOROETHANE
SOIL ISOCONCENTRATION MAP (APRIL 2011)

# R. D. PATE ESTATE
# 101 EAST MAIN STREET
# PIKEVILLE, NORTH CAROLINA
# EA PROJECT NO. 07-7019.6

FIGURE: 2 | DATE: APRIL 2011

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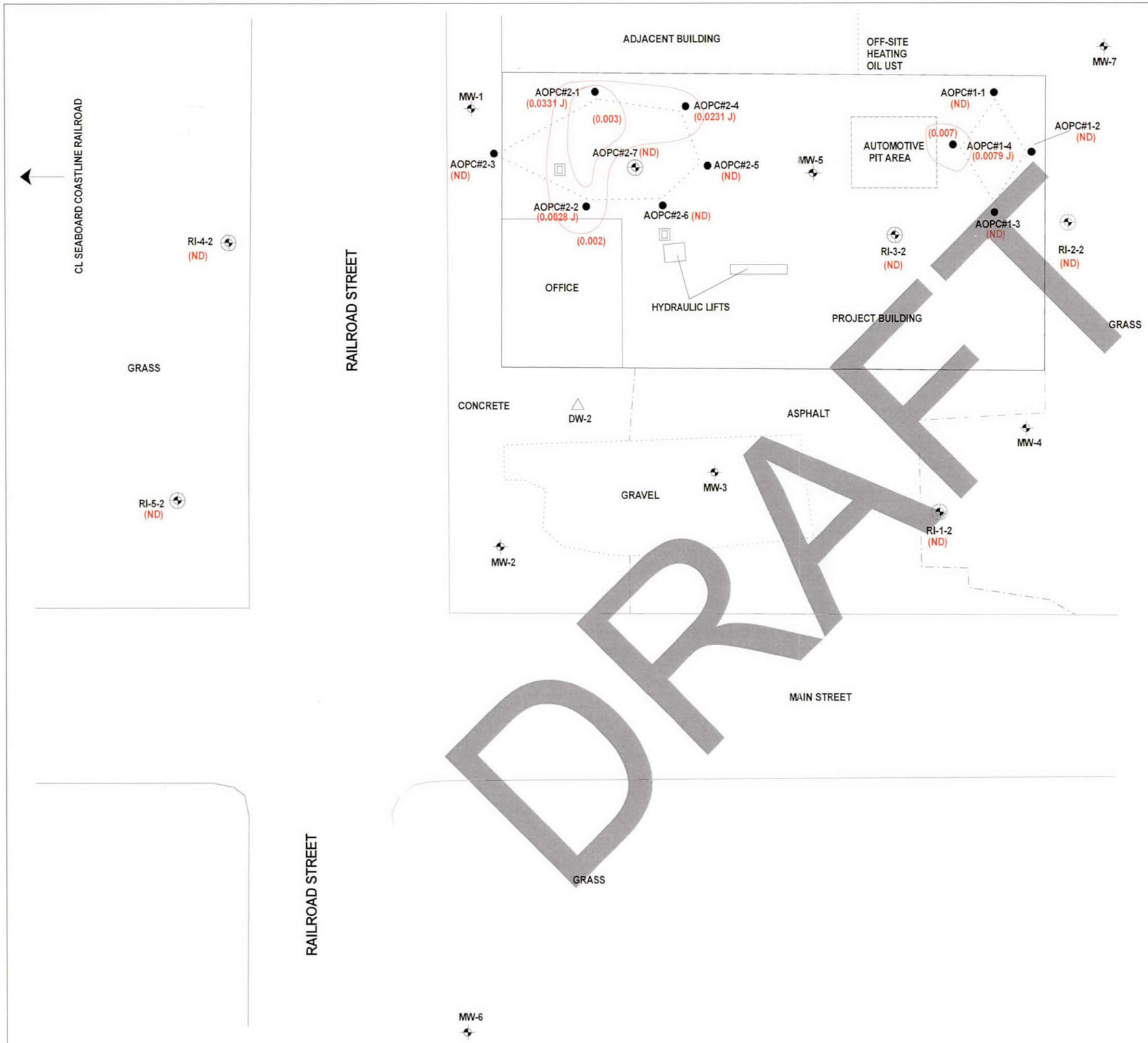




## LEGEND

- TYPE II GROUNDWATER MONITORING WELL LOCATION
- TYPE III GROUNDWATER MONITORING WELL LOCATION
- SOIL SAMPLE LOCATION
- TYPE II MONITORING WELL AND SOIL SAMPLE (2011) LOCATION
- DRAIN
- 1,1,2,2-TETRACHLOROETHANE COUNTOUR LINE

N

0 10 20

Scale: 1"=10'

TETRACHLOROETHENE (PCE)
SOIL ISOCONCENTRATION MAP (APRIL 2011)

# R. D. PATE ESTATE
# 101 EAST MAIN STREET
# PIKEVILLE, NORTH CAROLINA
# EA PROJECT NO. 07-7019.6

FIGURE: 2 | DATE: APRIL 2011

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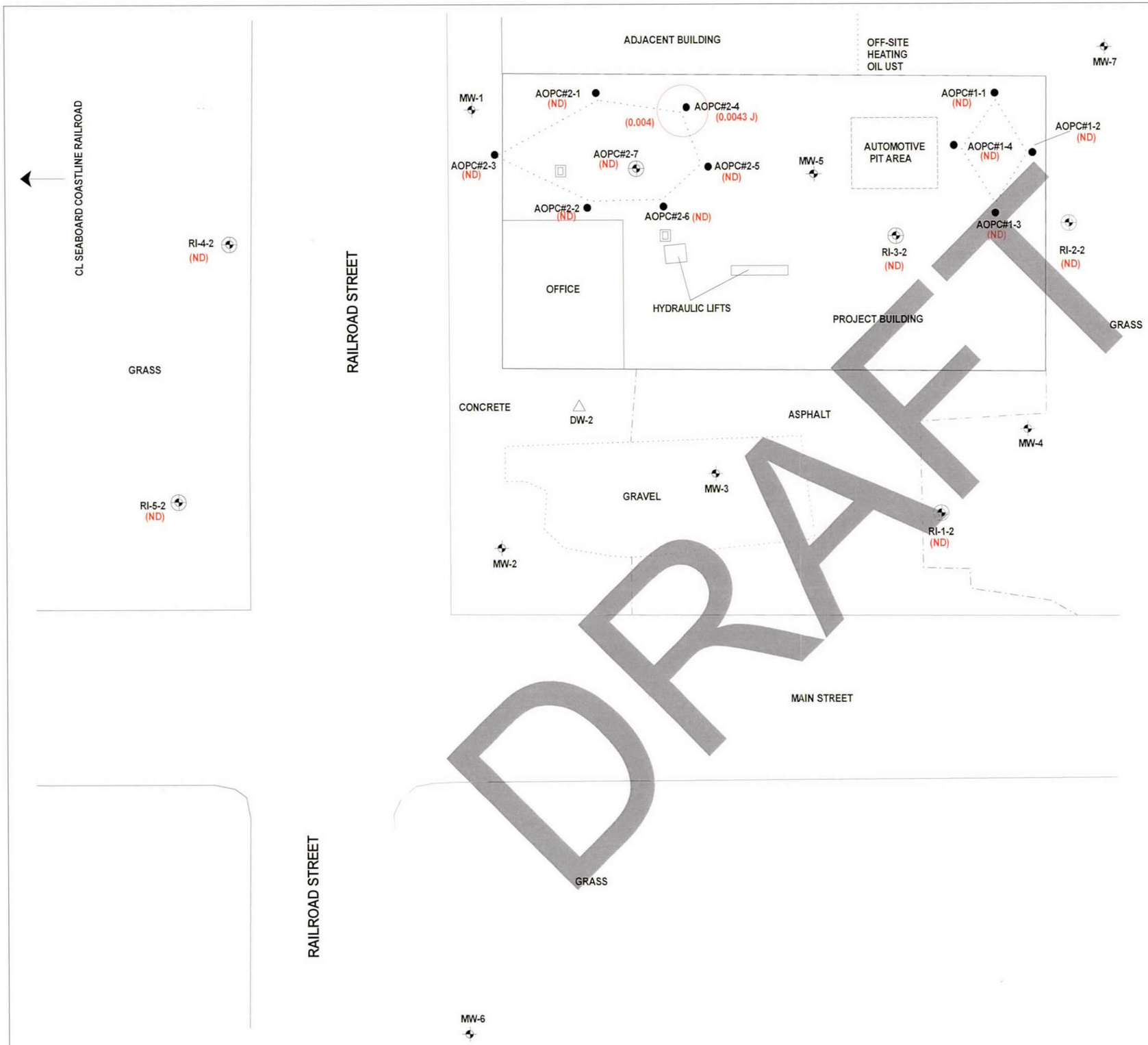




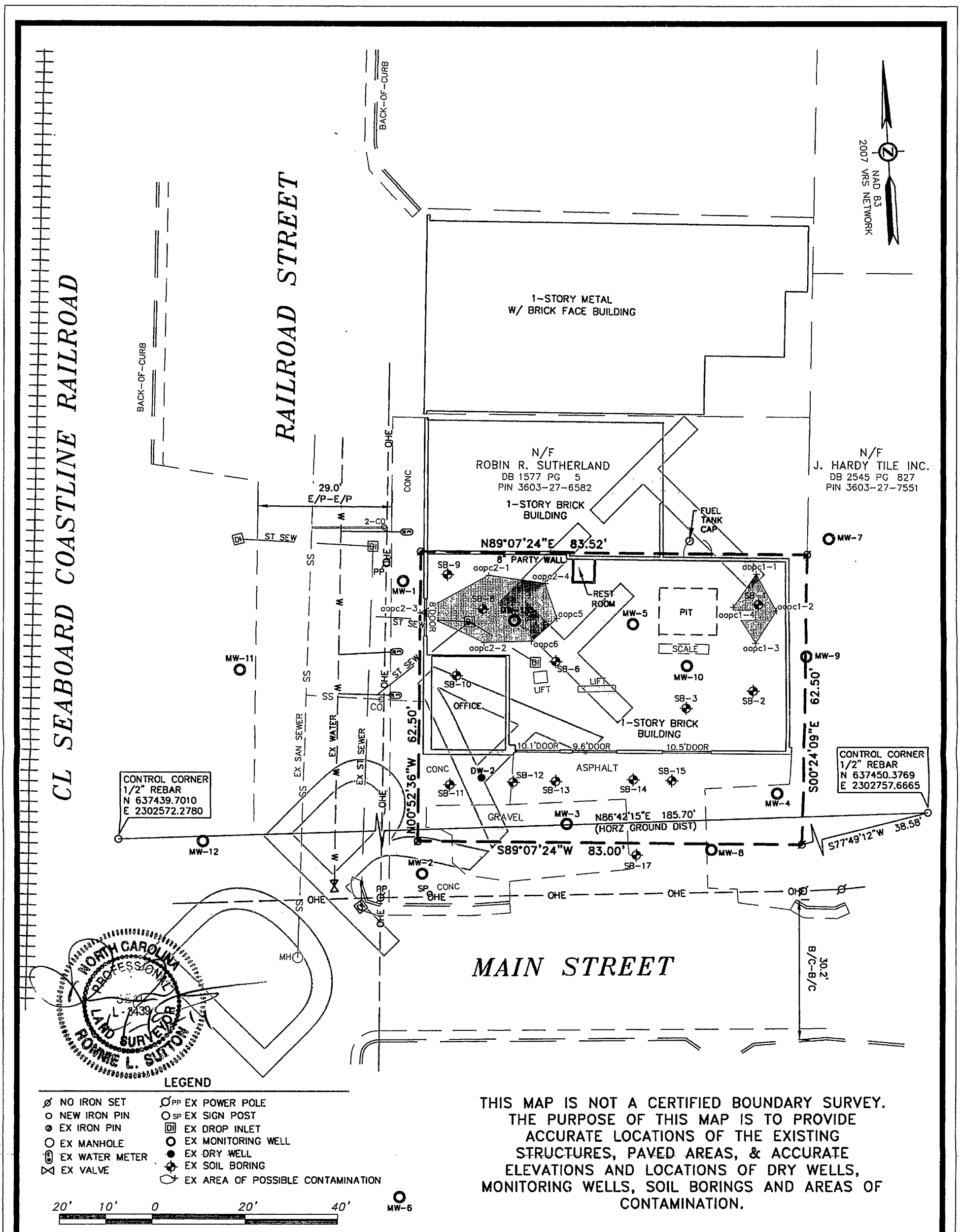

## LEGEND

- TYPE II GROUNDWATER MONITORING WELL LOCATION
- TYPE III GROUNDWATER MONITORING WELL LOCATION
- SOIL SAMPLE LOCATION
- TYPE II MONITORING WELL AND SOIL SAMPLE (2011) LOCATION
- DRAIN
- TETRACHLOROETHENE (PCE) COUNTOUR LINE

N

0 10 20

Scale: 1"=10'




LEGEND

- NO IRON SET
- NEW IRON PIN
- EX IRON PIN
- EX MANHOLE
- EX WATER METER
- EX VALVE
- PP EX POWER POLE
- SP EX SIGN POST
- DI EX DROP INLET
- EX MONITORING WELL
- EX DRY WELL
- EX SOIL BORING
- EX AREA OF POSSIBLE CONTAMINATION

20' 10' 0 20' 40'

MW-6

THIS MAP IS NOT A CERTIFIED BOUNDARY SURVEY. THE PURPOSE OF THIS MAP IS TO PROVIDE ACCURATE LOCATIONS OF THE EXISTING STRUCTURES, PAVED AREAS, & ACCURATE ELEVATIONS AND LOCATIONS OF DRY WELLS, MONITORING WELLS, SOIL BORINGS AND AREAS OF CONTAMINATION.

P:\08PROJ\4783\4783-LDDT\dwg\4783A-ENVIROMENTAL MAP.dwg 4/19/2011 3:29:35 PM EDT



Property of

# P. D. Pate Estate

101 East Main Street – Town of Pikeville – Wayne County, North Carolina

**Scale: 1"= 20'** **Date: April 2011**


## Herring–Sutton & Associates, P.A.

**Engineers – Surveyors – Planners**

**2201 Nash Street NW**
**Wilson, NC 27896**

**Tel. (252) 291–8887**
**Fax (252) 291–5900**

## MONITORING WELL DATA
## (ELEVATIONS AT TOP OF PVC CASING)

| Description | Northing | Easting | Elevation |
|---|---|---|---|
| mw-1 | 637497.0825 | 2302632.288 | 136.11 |
| mw-2 | 637433.8111 | 2302638.0534 | 135.45 |
| mw-3 | 637445.4764 | 2302668.9503 | 135.70 |
| mw-4 | 637453.1378 | 2302714.2625 | 135.75 |
| mw-5 | 637489.0546 | 2302682.2433 | 136.30 |
| mw-6 | 637363.5785 | 2302635.0013 | 135.16 |
| mw-7 | 637508.2538 | 2302724.1198 | 136.76 |
| mw-8 | 637440.6205 | 2302700.5035 | 135.81 |
| mw-9 | 637483.0433 | 2302719.8570 | 136.60 |
| mw-10 | 637480.3978 | 2302694.144 | 136.45 |
| mw-11 | 637477.1810 | 2302597.5140 | 136.26 |
| mw-12 | 637439.7457 | 2302590.4570 | 136.20 |
| mw-13 | 637489.1990 | 2302656.5156 | 136.38 |

## DRY WELL DATA

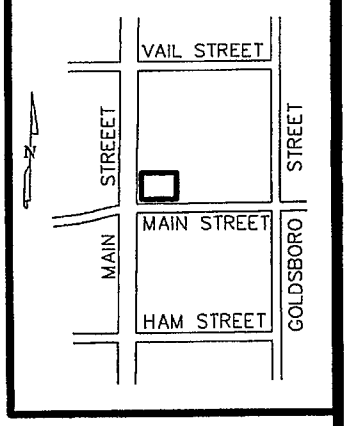
| DESCRIPTION | NORTHING | EASTING | ELEVATION |
|---|---|---|---|
| dw-2 | 637455.0248 | 2302650.2978 | 135.79 |

## SOIL BORING DATA

| DESCRIPTION | NORTHING | EASTING |
|---|---|---|
| sb-1 | 637493.8368 | 2302709.328 |
| sb-2 | 637475.278 | 2302708.532 |
| sb-3 | 637471.2561 | 2302694.184 |
| sb-6 | 637480.6791 | 2302665.7113 |
| sb-8 | 637491.4906 | 2302649.6719 |
| sb-9 | 637498.7765 | 2302641.8806 |
| sb 10 | 637477.0864 | 2302644.3626 |
| sb-11 | 637453.3448 | 2302643.5513 |
| sb-12 | 637454.2124 | 2302657.1139 |
| sb-13 | 637454.6401 | 2302666.2813 |
| sb-14 | 637455.3892 | 2302683.0713 |
| sb-15 | 637455.3183 | 2302690.6860 |
| sb-17 | 637439.0903 | 2302684.2458 |

## AREA OF POSSIBLE CONTAMINATION DATA

| DESCRIPTION | NORTHING | EASTING |
|---|---|---|
| aopc1-1 | 637500.4103 | 2302708.6663 |
| aopc1-2 | 637492.6250 | 2302713.1999 |
| aopc1-3 | 637485.5537 | 2302708.8227 |
| aopc1-4 | 637498.1913 | 2302703.9012 |
| aopc2-1 | 637498.8476 | 2302650.7457 |
| aopc2-2 | 637484.3526 | 2302650.1406 |
| aopc2-3 | 637490.3852 | 2302636.1892 |
| aopc2-4 | 637497.3502 | 2302662.9827 |
| aopc-5 | 637489.8994 | 2302665.7506 |
| aopc-6 | 637484.8967 | 2302660.3369 |




SITE LOCATION

## LEGEND

| | |
|---|---|
| mw | EX MONITORING WELL |
| dw | EX DRY WELL |
| sb | EX SOIL BORING |
| aopc | EX AREA OF POSSIBLE CONTAMINATION |

THIS MAP IS NOT A CERTIFIED BOUNDARY SURVEY. THE PURPOSE OF THIS MAP IS TO PROVIDE ACCURATE LOCATIONS OF THE EXISTING STRUCTURES, PAVED AREAS, & ACCURATE ELEVATIONS AND LOCATIONS OF DRY WELLS, MONITORING WELLS, SOIL BORINGS AND AREAS OF CONTAMINATION.

COORDINATES ARE BASED ON NAD 83/VRS 2007 NETWORK. TRIMBLE 5800 SERIES RECEIVER WAS UTILIZED WITH OBSERVED CONTROL. COORDINATES ARE LOCALIZED GROUND COORDINATES.

I, RONNIE L. SUTTON, CERTIFY THAT THIS SURVEY IS OF ANOTHER CATEGORY SUCH AS THE RECOMBINATION OF EXISTING PARCELS, A COURT-ORDERED SURVEY, OR OTHER EXCEPTION TO THE DEFINITION OF SUBDIVISION;
I, RONNIE L. SUTTON, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK 1060, PAGE 340 OR OTHER REFERENCE SOURCE _____); THAT THE BOUNDARIES NOT SURVEYED ARE INDICATED AS DRAWN FROM INFORMATION IN BOOK 1060, PAGE 340 OR OTHER REFERENCE SOURCE _____; THAT THE RATIO OF PRECISION AS CALCULATED BY LATITUDES AND DEPARTURES IS 1:10,000±; AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56.1600)

THIS 19th DAY OF April, 2011

RONNIE L. SUTTON, NORTH CAROLINA PROFESSIONAL LAND SURVEYOR L-3439

SEAL
L-3439
RONNIE L. SUTTON



P:\08PROJ\4783\4783-LDDT\dwg\4783A-ENVIROMENTAL MAP.dwg 4/19/2011 12:07:44 PM EDT



Property of

# P. D. Pate Estate

101 East Main Street – Town of Pikeville – Wayne County, North Carolina

**Scale: 1"= 20'**

**Date: April 2011**


## Herring-Sutton & Associates, P.A.

**Engineers – Surveyors – Planners**

**2201 Nash Street NW**
**Wilson, NC 27896**

**Tel. (252) 291-8887**
**Fax (252) 291-5900**

TABLE 1

SOIL ANALYTICAL RESULTS (JUNE 2008)
R.D. PATE ESTATE
INCIDENT NUMBER: 7568
101 EAST MAIN STREET
PIKEVILLE, WAYNE COUNTY, NORTH CAROLINA
ENVIROASSESSMENTS, PLLC PROJECT NO. 07-7019.5

| Sample ID | Analytical Method | SB-1-1 | SB-2-1 | SB-3-1 | SB-4-1 | SB-5-1 | SB-6-1 | SB-7-1 | SB-8-1 | SB-9-1 | SB-10-1 | Soil Remediation Goal - Groundwater Protection (mg/kg) | Soil Remediation Goal - Human Health (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Depth (ft, bgs) | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| Collection Date | | 6/3/2008 | 6/3/2008 | 6/3/2008 | 6/3/2008 | 6/3/2008 | 6/3/2008 | 6/3/2008 | 6/3/2008 | 6/3/2008 | 6/3/2008 | | |
| *Volatile Organic Compounds by EPA Method 8260B* | | | | | | | | | | | | | |
| Benzene | 8260B | **0.00943** | **0.00942** | **0.0101** | **0.00967** | 0.00541 | 0.00400 | **0.00973** | 0.00485 | 0.00459 | **0.00794** | 0.0077 | 1.1 |
| Toluene | 8260B | 0.125 | 0.100 | 0.122 | 0.115 | 0.0907 | 0.0842 | 0.169 | 0.0650 | 0.101 | 0.0868 | 9.8 | 930 |
| Ethylbenzene | 8260B | 0.0485 | 0.0553 | 0.0698 | 0.0653 | 0.0513 | 0.0844 | 0.0710 | 0.0338 | 0.0998 | 0.0526 | 8.2 | 5.7 |
| M&P Xylenes | 8260B | 0.150 | 0.157 | 0.213 | 0.192 | 0.164 | 0.274 | 0.211 | 0.102 | 0.296 | 0.158 | NS | 890 |
| O-Xylene | 8260B | 0.0490 | 0.0471 | 0 0750 | 0.0645 | 0.0623 | 0.120 | 0.0969 | 0.0366 | 0.137 | 0.0531 | NS | 300 |
| Total Xylenes | 8260B | 0.199 | 0.204 | 0.288 | 0.257 | 0.226 | 0 394 | 0.308 | 0.139 | 0.433 | 0.211 | 7.1 | 120 |
| 1,1,2,2 Tetrachloroethane | 8260B | **0.00327** | ND | ND | ND | ND | ND | **0.0107** | **0.0124** | **0.00495** | ND | 0 59 | 0.001 |
| Isopropylbenzene | 8260B | ND | ND | ND | ND | ND | 0.00844 | ND | ND | 0.0111 | ND | 1.5 | 310 |
| N-Propylbenzene | 8260B | 0 00716 | 0.00702 | 0.0129 | 0.0112 | 0 00989 | 0.0267 | 0.0142 | ND | 0.0379 | 0.00915 | 1 7 | NA |
| 1,3,5-Trimethylbenzene | 8260B | 0.00948 | 0.00919 | 0.0192 | 0.0146 | 0.0147 | 0.0491 | 0.0219 | 0.00715 | 0.0584 | 0 0132 | 6.5 | 9.4 |
| 1,2,4-Trimethylbenzene | 8260B | 0.0316 | 0.0259 | 0.0613 | 0.0477 | 0.0534 | 0.155 | 0 0758 | 0.0232 | 0.177 | 0.0439 | 6.6 | 13 |
| N-Butylbenzene | 8260B | ND | ND | ND | ND | ND | ND | ND | ND | 0.00697 | ND | 4.3 | NA |
| Tert-Butylbenzene | 8260B | ND | ND | ND | ND | ND | ND | 0.0100 | ND | 0.0254 | ND | 3.4 | NA |
| Trichloroethene | 8260B | ND | ND | ND | ND | ND | ND | 0.00826 | 0.00768 | ND | ND | 0.017 | 2.8 |
| Acetone | 8260B | ND | ND | ND | ND | ND | 0 151 | ND | ND | ND | ND | 2.8 | 12000 |
| Trichlorofluoromethane | 8260B | ND | ND | ND | ND | ND | 0.00633 | ND | ND | ND | ND | 25 | 160 |
| Naphthalene | 8260B | ND | ND | ND | ND | 0.00452 | 0.0771 | 0.00796 | ND | 0.00903 | ND | 0.86 | 3.9 |
| *Total Metals by EPA Method 6010B* | | | | | | | | | | | | | |
| Silver | 6010B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 3 | 78 |
| Beryllium | 6010B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NS | 32 |
| Cadmium | 6010B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 2.6 | 14 |
| Antimony | 6010B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NS | 6 2 |
| Selenium | 6010B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5.2 | 78 |
| Thallium | 6010B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NS | 1 |
| Chromium | 6010B | 1.70 | 3.14 | 3.16 | 2.59 | 1.55 | 4.81 | 2.57 | 2.79 | 1.02 | 4.15 | NS | 280 |
| Manganese | 6010B | 3.66 | 29.70 | 38.80 | 45.2 | 5.37 | 62.3 | 22.0 | ND | 6.26 | 276 | 65 | 360 |
| Copper | 6010B | ND | 4.56 | 7.98 | 5.11 | ND | ND | 3.89 | ND | ND | 25.40 | 700 | 630 |
| Nickel | 6010B | ND | 1.24 | 1.84 | ND | ND | 3.35 | 1.32 | ND | ND | 3.42 | 130 | 300 |
| Zinc | 6010B | ND | 11.6 | 82.3 | 9.53 | ND | ND | 15.7 | 9.82 | 10.1 | 69.8 | 13000 | 4600 |
| Arsenic | 6010B | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1.33 | 5.4 | 4.4 |
| Lead | 6010B | 28.9 | 35.1 | 58.0 | 40.2 | 5.6 | 5.21 | 21.8 | 4.82 | 3.54 | 122 | 270 | 400 |
| *Mercury by EPA Method 7471* | | | | | | | | | | | | | |
| Mercury | 7471 | 0.121 | 0.188 | 0.19 | 0.101 | 0.0547 | 0.0317 | 0.115 | 0.0238 | 0.0301 | 0.140 | 1.1 | 4.6 |

Notes:
(1) North Carolina Inactive Hazardous Sites Branch Soil Remediation Goals (October 2009)
All concentrations are reported in milligrams per kilogram (mg/kg).
ft, bgs - feet below ground surface
NS - No Standard
ND - Not Detected
**Bold** values exceed their respective Soil Remediation Goals.

**TABLE 1**

**SOIL ANALYTICAL RESULTS (JUNE 2008)**
**R.D. PATE ESTATE**
**INCIDENT NUMBER: 7568**
**101 EAST MAIN STREET**
**PIKEVILLE, WAYNE COUNTY, NORTH CAROLINA**
**ENVIROASSESSMENTS, PLLC PROJECT NO. 07-7019.3**

| Sample ID | Analytical Method | SB-12-1 | SB-13-1 | SB-14-1 | SB-15-1 | SB-16-1 | SB-17-1 | SB-18-1 | SB-19-1 | SB-20-1 | SB-21-1 | SB-22-1 | Soil Remediation Goal - Groundwater Protection (1) (mg/kg) | Soil Remediation Goal - Human Health (1) (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Depth (ft, bgs) | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| Collection Date | | 6/3/2008 | 6/3/2008 | 6/3/2008 | 6/3/2008 | 6/3/2008 | 6/3/2008 | 6/3/2008 | 6/3/2008 | 6/3/2008 | 6/3/2008 | 6/3/2008 | | |
| *Volatile Organic Compounds by EPA Method 8260B with IPE and MTBE* | | | | | | | | | | | | | | |
| Benzene | 8260B | ND | **0.0278** | **0.0295** | ND | **0.0168** | ND | ND | 0.00340 | 0.00286 | ND | ND | 0.0077 | 1.1 |
| Toluene | 8260B | ND | 0.153 | ND | 3.13 | 0.127 | **40.3** | 0.0219 | 0.0245 | 0.0196 | 0.0204 | ND | 9.8 | 930 |
| Ethyl Benzene | 8260B | **10.3** | 0.360 | 1.19 | **10.6** | 0.111 | **42.1** | 0.0112 | 0.0112 | 0.00924 | 0.0104 | ND | 8.2 | 5.7 |
| M&P Xylenes | 8260B | 42.8 | 0.417 | 4.14 | 10.6 | 0.257 | 133 | 0.0289 | 0.0285 | 0.0227 | 0.0274 | ND | NS | 890 |
| O-Xylene | 8260B | 16.1 | 0.314 | 0.845 | 4.65 | 0.102 | 68.2 | 0.00819 | 0.00833 | 0.00663 | 0.00817 | ND | NS | 300 |
| Total Xylenes | 8260B | **58.9** | 0.731 | 4.99 | **25.3** | 0.359 | **201** | 0.0371 | 0.0368 | 0.0293 | 0.0356 | ND | 7.1 | 120 |
| Isopropylbenzene | 8260B | ND | 0.0430 | 0.0629 | ND | 0.0117 | **6.42** | ND | ND | ND | ND | ND | 1.5 | 310 |
| N-Propylbenzene | 8260B | **8.97** | 0.118 | 0.167 | **4.77** | 0.0335 | **24.2** | ND | ND | ND | ND | ND | 1.7 | NA |
| 1,3,5-Trimethylbenzene | 8260B | **23.6** | 0.183 | 0.688 | ND | 0.0355 | **47.5** | ND | ND | ND | ND | ND | 6.5 | 9.4 |
| 1,2,4-Trimethylbenzene | 8260B | **67.5** | 1.02 | 2.96 | **5.53** | 0.151 | **112** | 0.00641 | ND | ND | ND | ND | 6.6 | 13 |
| P-Isopropyltoluene | 8260B | ND | 0.0207 | 0.0104 | 19.0 | ND | ND | ND | ND | ND | ND | ND | not listed | not listed |
| Sec-Butylbenzene | 8260B | ND | 0.0231 | 0.0133 | ND | ND | ND | ND | ND | ND | ND | ND | 3.3 | NA |
| N-Butylbenzene | 8260B | **4.83** | 0.0573 | 0.0314 | ND | 0.00660 | **9.03** | ND | ND | ND | ND | ND | 4.3 | NA |
| Acetone | 8260B | ND | 0.0983 | 0.0998 | ND | 0.0923 | ND | ND | ND | ND | ND | ND | 2.8 | 12000 |
| Naphthalene | 8260B | **22.4** | **1.16** | 0.143 | ND | 0.0174 | **42.2** | ND | ND | ND | ND | ND | 0.86 | 3.9 |
| *Total Metals by EPA Method 6010B* | | | | | | | | | | | | | | |
| Silver | 6010B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 3 | 78 |
| Beryllium | 6010B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NS | 32 |
| Cadmium | 6010B | ND | ND | ND | ND | ND | ND | ND | ND | 0.691 | ND | ND | 2.6 | 14 |
| Antimony | 6010B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NS | 6.2 |
| Selenium | 6010B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5.2 | 78 |
| Thallium | 6010B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NS | 1 |
| Chromium | 6010B | 2.89 | 3.65 | 2.75 | 3.65 | 2.61 | 9.06 | 3.27 | 4.71 | 0.691 | 12.8 | 8.21 | NS | 280 |
| Manganese | 6010B | 14.2 | 10.6 | 14.4 | 20.2 | 19.2 | 18.9 | 7.57 | 59.9 | **110** | 30.8 | 33.3 | 65 | 360 |
| Copper | 6010B | 6.28 | 4.73 | 49.2 | 10.9 | 3.92 | 15.1 | ND | 10.1 | 14.5 | 5.73 | 8.21 | 700 | 630 |
| Nickel | 6010B | 1.15 | ND | ND | 1.49 | 1.25 | 2.22 | 1.11 | 1.49 | 2.18 | 2.62 | 1.64 | 130 | 300 |
| Zinc | 6010B | 27.0 | 16.1 | 115 | 72.3 | 30.4 | 82.5 | 134 | 197 | 381 | 48.0 | 73.0 | 13000 | 4600 |
| Arsenic | 6010B | ND | 1.15 | ND | ND | ND | 1.96 | ND | 1.31 | 2.74 | **4.91** | 2.39 | 5.4 | 4.4 |
| Lead | 6010B | 68.0 | 21.5 | 29.90 | 274 | 62.5 | **1210** | 10.1 | 159 | 379 | 16.3 | 67.0 | 270 | 400 |
| *Mercury by EPA Method 7471* | | | | | | | | | | | | | | |
| Mercury | 7471 | 0.380 | 0.0254 | 0.0817 | 0.0807 | 0.0722 | 0.102 | 0.0182 | 0.139 | 0.201 | 0.0807 | 0.0900 | 1.1 | 4.6 |

Notes:
(1) North Carolina Inactive Hazardous Sites Branch Soil Remediation Goals (October 2009)
All concentrations are reported in milligrams per kilogram (mg/kg).
ft, bgs - feet below ground surface
NS - No Standard
ND - Not Detected
**Bold** values exceed their respective Soil Remediation Goals

TABLE 2

MONITORING WELL CONSTRUCTION/WATER LEVEL INFORMATION
R.D. PATE ESTATE
INCIDENT NUMBER: 7568
PIKEVILLE, WAYNE COUNTY, NORTH CAROLINA
ENVIROASSESSMENTS, PLLC - PROJECT NO. 07-7019.3

| Well I.D. | Installation Date | Well Inner Diameter (in.) | Total Well Depth (ft., bgs) | Screened Interval (ft., bgs) | Top of Casing Relative Elevation (ft.) | DTW 4/5/2011 (ft., TOC) | Relative Water Table Elevation (ft.) |
|---|---|---|---|---|---|---|---|
| MW-1 | 9/5/2007 | 2 | 14 | 4 to 14 | 136.11 | 3.70 | 132.41 |
| MW-2 | 9/5/2007 | 2 | 14 | 4 to 14 | 135.45 | 3.50 | 131.95 |
| MW-3 | 9/5/2007 | 2 | 14 | 4 to 14 | 135.70 | 3.89 | 131.81 |
| MW-4 | 9/5/2007 | 2 | 14 | 4 to 14 | 135.75 | 2.43 | 133.32 |
| MW-5 | 6/3/2008 | 1 | 14 | 4 to 14 | 136.30 | 3.85 | 132.45 |
| MW-6 | 6/3/2008 | 1 | 14 | 4 to 14 | 135.16 | 3.94 | 131.22 |
| MW-7 | 7/15/2008 | 2 | 15 | 5 to 10 | 136.76 | 4.13 | 132.63 |
| MW-8 | 3/30/2011 | 1 | 28 | 18 to 28 | 135.81 | 19.15 | 116.66 |
| MW-9 | 3/30/2011 | 1 | 28 | 18 to 28 | 136.60 | 14.43 | 122.17 |
| MW-10 | 3/30/2011 | 1 | 28 | 18 to 28 | 136.45 | 21.54 | 114.91 |
| MW-11 | 3/31/2011 | 1 | 28 | 18 to 28 | 136.26 | 10.51 | 125.75 |
| MW-12 | 3/31/2011 | 1 | 15 | 5 to 15 | 136.20 | 4.56 | 131.64 |
| MW-13 | 3/31/2011 | 1 | 28 | 18 to 28 | 136.38 | 18.66 | 117.72 |
| DW-2* | 7/15/2008 | 2 | 60 | 55 to 60 | 135.79 | 7.17 | 128.62 |

TOC = top of casing.

DTW = depth to water.

bgs = below ground surface

* = Type III Monitoring Well

**TABLE 3**

**SOIL ANALYTICAL RESULTS (MARCH 2011)**
**R.D. PATE ESTATE**
**INCIDENT NUMBER: 7568**
**101 EAST MAIN STREET**
**PIKEVILLE, WAYNE COUNTY, NORTH CAROLINA**
**ENVIROASSESSMENTS, PLLC PROJECT NO. 07-7019.6**

| Sample ID | Analytical Method | RI-1-2 (MW-8) | RI-2-2 (MW-9) | RI-3-2 (MW-10) | RI-4-2 (MW-11) | RI-5-2 (MW-12) | AOPC#1-1 | AOPC#1-2 | AOPC#1-3 | AOPC#1-4 | IHSB Preliminary Health-Based SRG | IHSB Protection of Groundwater SRG |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Depth (ft, bgs) | | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | | |
| Collection Date | | 3/30/2011 | 3/30/2011 | 3/30/2011 | 3/31/2011 | 3/31/2011 | 3/30/2011 | 3/30/2011 | 3/30/2011 | 3/30/2011 | | |
| *Volatile Organic Compounds (VOCs) by EPA Method 8260B Plus Tics* | | | | | | | | | | | | |
| Benzene | 8260 | **0.325** | ND | ND | ND | **0.0448** | ND | ND | ND | ND | 1.1 | 0.0073 |
| Toluene | 8260 | ND | ND | ND | ND | ND | ND | ND | ND | 0.0021 J | 820 | 5.5 |
| Ethylbenzene | 8260 | 2.650 | ND | ND | ND | 0.0113 | ND | ND | ND | ND | 5.4 | 8.1 |
| M&P Xylenes | 8260 | 5.520 | ND | ND | ND | 0.0101 | ND | ND | ND | ND | 390 | 6.0 |
| O-Xylene | 8260 | 0.164 J | ND | ND | ND | ND | ND | ND | ND | ND | 430 | 6.0 |
| Total Xylenes | 8260 | 5.690 | ND | ND | ND | 0.0101 | ND | ND | ND | ND | 130 | 6.0 |
| 1,1,2,2 Tetrachloroethane | 8260 | ND | ND | ND | ND | ND | ND | ND | ND | **0.0079 J** | 0.56 | 0.0012 |
| Isopropylbenzene | 8260 | 0.335 | ND | ND | ND | ND | ND | ND | ND | ND | 270 | 1.3 |
| N-Propylbenzene | 8260 | 1.120 | ND | ND | ND | 0.0022 J | ND | ND | ND | ND | 260 | 1.5 |
| 1,3,5-Trimethylbenzene | 8260 | 1.600 | ND | ND | ND | ND | ND | ND | ND | ND | 160 | 6 7 |
| 1,2,4-Trimethylbenzene | 8260 | **7.990** | ND | ND | ND | 0.0026 J | ND | ND | 0.0044 J | 0.0031 J | 12 | 6.7 |
| N-Butylbenzene | 8260 | 0.969 | ND | ND | ND | ND | ND | ND | ND | ND | NE | 4.3 |
| Tert-Butylbenzene | 8260 | ND | ND | ND | ND | ND | ND | ND | ND | ND | NE | 3.4 |
| Sec-Butylbenzene | 8260 | 0.214 | ND | ND | ND | ND | ND | ND | ND | ND | NE | 3.3 |
| Trichloroethene (TCE) | 8260 | ND | ND | ND | ND | ND | 0.0048 | ND | ND | 0 0170 | 2.8 | 0.018 |
| Acetone | 8260 | ND | 0.0363 J | 0.157 J | 0.0114 J | 0.0314 J | 0.0653 J | 0.0460 J | 0.114 | 0.0997 J | 12000 | 24 |
| Trichlorofluoromethane | 8260 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 160 | 24 |
| Naphthalene | 8260 | **1.950** | ND | ND | ND | ND | ND | ND | 0 0048 J | ND | 3.6 | 0.21 |
| P-Isopropyltoluene | 8260 | 0.394 | ND | ND | ND | ND | ND | ND | ND | ND | NE | NE |
| 2-Butanone (MEK) | 8260 | ND | ND | ND | ND | ND | 0.0075 J | 0.0034 J | 0.0123 J | ND | 5600 | 16 |
| Cis-1,2-Dichloroethene | 8260 | ND | ND | ND | ND | 0.0030 J | ND | ND | ND | ND | 32 | 0.36 |
| Trans-1,2-Dichloroethene | 8260 | ND | ND | ND | ND | 0.0019 J | ND | ND | ND | ND | 30 | 0.51 |
| Tetrachloroethene (PCE) | 8260 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0 55 | 0.005 |
| 2-Chlorotoluene | 8260 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 320 | 1.2 |
| Total TICs | 8260 | 65.14 | 0.0611 | 0.03831 | 0.00591 | 0.228 | 0.0657 | 107.73 | 0.07793 | 134.21 | NE | NE |
| *Semi-Volatile Organic Compounds by EPA Method 8270 plus TICs* | | | | | | | | | | | | |
| 2-Methylnaphthalene | 8270 | **2.060 J** | ND | ND | ND | ND | ND | ND | ND | ND | 62 | 1.6 |
| 1-Methylnaphthalene | 8270 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 22 | NE |
| Naphthalene | 8270 | **2.290 J** | ND | ND | ND | ND | ND | ND | ND | ND | 3.6 | 0.21 |
| Benzo(a)anthracene | 8270 | ND | 0.134 J | ND | ND | ND | ND | ND | ND | ND | 0.15 | 0.18 |
| Benzo(b)fluoranthene | 8270 | ND | 0.103 J | ND | ND | ND | ND | ND | ND | ND | 0.15 | 0.6 |
| Benzo(k)fluoranthene | 8270 | ND | 0.0865 J | ND | ND | ND | ND | ND | ND | ND | 1.5 | 5.9 |
| Benzo(a)pyrene | 8270 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0 015 | 0.059 |
| Benzo(g,h,i)perylene | 8270 | ND | ND | ND | ND | ND | ND | ND | ND | ND | NE | 360 |
| Butylbenzylphthalate | 8270 | ND | 0.0882 J | ND | ND | ND | ND | ND | ND | ND | 260 | 150 |
| Chrysene | 8270 | ND | 0.142 J | ND | ND | ND | 0.0640 J | ND | ND | ND | 15 | 18 |
| 3,3-Dichlorobenzidine | 8270 | ND | 0.157 J | ND | ND | ND | ND | ND | ND | ND | 1.1 | NE |
| 4,6-Dinitro-2-methylphenol | 8270 | ND | 0.0768 J | ND | ND | ND | ND | ND | ND | ND | 0.98 | NE |
| 2,4-Dinitrophenol | 8270 | ND | 1.580 J | ND | ND | ND | ND | ND | ND | ND | 24 | NE |
| Fluoranthene | 8270 | ND | 0 106 J | ND | ND | ND | 0.100 J | ND | ND | ND | 460 | 330 |
| 4-Nitroaniline | 8270 | ND | 0.145 J | ND | ND | ND | ND | ND | ND | ND | 24 | NE |
| 4-Nitrophenol | 8270 | ND | 0.532 J | ND | ND | ND | ND | ND | ND | ND | NE | NE |
| Pentachlorophenol | 8270 | ND | **0.998 J** | ND | ND | ND | ND | ND | ND | ND | 0.89 | 0.031 |
| Pyrene | 8270 | ND | 0.0932 J | ND | ND | ND | ND | ND | ND | ND | 340 | 220 |
| Bis(2-Ethylhexyl)phthalate | 8270 | ND | ND | 0.275 J | ND | ND | ND | ND | ND | ND | 35 | 7.2 |
| Phenanthrene | 8270 | ND | ND | ND | ND | ND | 0 0742 J | ND | ND | ND | NE | 57 |
| Anthracene | 8270 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 3400 | 660 |
| Dibenz(a,h)antracene | 8270 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.015 | 0.19 |
| Indeno(1,2,3-cd)pyrene | 8270 | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.15 | 2.0 |
| Total TICs | 8270 | 2.223 | 0.2778 | ND | 1.001 | 0.720 | 0 304 | 0.591 | 0.6091 | 0.236 | NE | NE |
| *Total Metals by EPA Method 6010B* | | | | | | | | | | | | |
| Antimony | 6010 | ND | 0.63 | ND | 0 45 J | **1.0** | **2.0** | 0 49 | **1.0** | 0.74 | 6.2 | 0.9 |
| Arsenic | 6010 | 0.50 | 2.8 | 0.86 | 1.8 | 2.3 | 3.1 | 1.2 | 1.7 | 2 0 | 4.4 | 5.8 |
| Beryllium | 6010 | 0.050 J | 0.081 J | 0.040 J | 0.080 J | 0 079 J | 0.18 | 0 051 J | 0.077 J | 0.086 | 32 | 63 |
| Cadmium | 6010 | ND | 0.22 | ND | ND | ND | 0.091 J | 0.31 | 1.6 | 0.45 | 14 | 3.0 |
| Chromium | 6010 | 2.8 | 5.5 | 2.7 | 2.4 | 7.6 | 5.5 | 3.8 | 5.5 | 6.9 | 24000 | 360000 |
| Copper | 6010 | 3.4 | 17 2 | 13.2 | 13.9 | 21.1 | 71.6 | 7.6 | 41.9 | 28.5 | 620 | 700 |
| Lead | 6010 | 39.1 | 111 | 104 | 50.3 | 46.6 | 422 | 60.8 | **291** | 185 | 400 | 270 |
| Nickel | 6010 | 0.60 | 1.9 | 1.4 | 0 70 | 3.1 | 3.6 | 1.2 | 3.5 | 4.7 | 300 | 130 |
| Selenium | 6010 | 0.48 J | ND | ND | 0 63 J | 0.91 J | 0.61 J | ND | ND | 0.75 | 78 | 2.1 |
| Silver | 6010 | 0.033 J | 0.16 J | 0.077 J | 0 037 J | 0.054 J | 0.28 J | 0.084 J | 0.15 J | 0.18 J | 78 | 3.4 |
| Thallium | 6010 | **0.38 J** | ND | ND | ND | ND | ND | ND | ND | ND | 1 0 | 0.28 |
| Zinc | 6010 | 15.4 | 376 | 20.1 | 28 1 | 23.7 | 126 | 81.0 | 104 | 75.1 | 4600 | 1200 |
| *Mercury by EPA Method 7471* | | | | | | | | | | | | |
| Mercury | 7471 | < 0.019 | 0.11 | 0.28 | 0.022 | 0.024 | 0.29 | **1.7** | 0 15 | **1.5** | 1 1 | NE |

Notes:
All concentrations are reported in milligrams per kilograms (mg/kg).
ft, bgs - feet below ground surface
NE - Not Established
NT - Not Tested
ND - Not Detected
IHSB - North Carolina Inactive Hazardous Sites Branch
**Bold** values exceed respective IHSB Heath-Based and/or Protection of Groundwater Soil Remediation Goals (SRG).
"J" Value indicates an estimated concentration above the adjusted method detection limit and below the adjusted reporting limit

# TABLE 3

## SOIL ANALYTICAL RESULTS (MARCH 2011)
## R.D. PATE ESTATE
## INCIDENT NUMBER: 7568
## 101 EAST MAIN STREET
## PIKEVILLE, WAYNE COUNTY, NORTH CAROLINA
## ENVIROASSESSMENTS, PLLC PROJECT NO. 07-7019.6

| Sample ID | Analytical Method | AOPC#2-1 | AOPC#2-2 | AOPC#2-3 | AOPC#2-4 | AOPC#2-5A | AOPC#2-5B | AOPC#2-6 | AOPC#2-7 | IHSB Preliminary Health-Based SRG | IHSB Protection of Groundwater PSRG |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Depth (ft, bgs) | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| Collection Date | | 3/30/2011 | 3/30/2011 | 3/31/2011 | 3/31/2011 | 3/31/2011 | 3/31/2011 | 3/31/2011 | 3/31/2011 | | |
| ***Volatile Organic Compounds (VOCs) by EPA Method 8260B Plus TICs*** | | | | | | | | | | | |
| Benzene | 8260 | ND | ND | ND | ND | ND | ND | ND | 0.0017 J | 1.1 | 0.0073 |
| Toluene | 8260 | ND | ND | ND | ND | ND | ND | ND | ND | 820 | 5.5 |
| Ethylbenzene | 8260 | ND | ND | ND | ND | ND | 0.176 | 0.228 | ND | 5.4 | 8.1 |
| M&P Xylenes | 8260 | ND | ND | ND | ND | ND | 0.287 | 0.361 | ND | 390 | 6.0 |
| O-Xylene | 8260 | ND | ND | ND | ND | ND | ND | 0.104 | ND | 430 | 6.0 |
| Total Xylenes | 8260 | ND | ND | ND | ND | ND | 0.321 | 0.464 | ND | 130 | 6.0 |
| 1,1,2,2 Tetrachloroethane | 8260 | **0.0331** | **0.0028 J** | ND | **0.0231** | ND | ND | ND | ND | 0.56 | 0.0012 |
| Isopropylbenzene | 8260 | ND | ND | ND | ND | ND | 0.0726 J | 0.0702 | ND | 270 | 1.3 |
| N-Propylbenzene | 8260 | ND | ND | ND | ND | ND | 0.171 | 0.346 | ND | 260 | 1.5 |
| 1,3,5-Trimethylbenzene | 8260 | ND | ND | ND | ND | ND | 0.422 | 0.730 | ND | 160 | 6.7 |
| 1,2,4-Trimethylbenzene | 8260 | ND | ND | ND | ND | ND | 0.671 | 4.520 | ND | 12 | 6.7 |
| N-Butylbenzene | 8260 | ND | ND | ND | ND | ND | 0.187 | 0.465 | ND | NE | 4.3 |
| Tert-Butylbenzene | 8260 | ND | ND | ND | ND | ND | ND | ND | ND | NE | 3.4 |
| Sec-Butylbenzene | 8260 | ND | ND | ND | ND | ND | 0.0708 J | 0.0983 | ND | NE | 3.3 |
| Trichloroethene (TCE) | 8260 | **0.0478** | 0.0044 J | 0.0031 J | **0.0490** | ND | ND | ND | 0.0072 | 2.8 | 0.018 |
| Acetone | 8260 | ND | 0.0302 J | 0.0319 J | 0.0443 J | ND | ND | ND | 0.0698 J | 12000 | 24 |
| Trichlorofluoromethane | 8260 | ND | ND | ND | ND | ND | ND | ND | ND | 160 | 24 |
| Naphthalene | 8260 | 0.0014 J | ND | ND | ND | ND | **0.275** | **0.381** | ND | 3.6 | 0.21 |
| P-Isopropyltoluene | 8260 | ND | ND | ND | ND | ND | 0.157 | 0.236 | ND | NE | NE |
| 2-Butanone (MEK) | 8260 | ND | ND | ND | ND | ND | ND | ND | ND | 5600 | 16 |
| Cis-1,2-Dichloroethene | 8260 | ND | ND | ND | ND | ND | ND | 0.0327 J | 0.0015 J | 32 | 0.36 |
| Trans-1,2-Dichloroethene | 8260 | ND | ND | ND | ND | ND | ND | ND | ND | 30 | 0.51 |
| Tetrachloroethene (PCE) | 8260 | ND | ND | ND | 0.0043 J | ND | ND | ND | ND | 0.55 | 0.005 |
| 2-Chlorotoluene | 8260 | ND | ND | ND | ND | ND | ND | 0.393 | ND | 320 | 1.2 |
| Total TICs | 8260 | 0.00661 | 0.00767 | 0.02832 | 0.00858 | 0.00810 | 10.131 | 38.510 | 0.09815 | NE | NE |
| ***Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270 plus TICs*** | | | | | | | | | | | |
| 2-Methylnaphthalene | 8270 | ND | ND | ND | ND | ND | ND | 0.726 | ND | 62 | 1.6 |
| 1-Methylnaphthalene | 8270 | ND | ND | ND | ND | ND | ND | 0.496 | ND | 22 | NE |
| Naphthalene | 8270 | ND | ND | ND | ND | ND | ND | **0.449** | ND | 3.6 | 0.21 |
| Benzo(a)anthracene | 8270 | ND | ND | ND | **0.765** | ND | ND | ND | ND | 0.15 | 0.18 |
| Benzo(b)fluoranthene | 8270 | ND | ND | ND | **0.506** | ND | ND | ND | ND | 0.15 | 0.6 |
| Benzo(k)fluoranthene | 8270 | ND | ND | ND | 0.497 | ND | ND | ND | ND | 1.5 | 5.9 |
| Benzo(a)pyrene | 8270 | ND | ND | ND | **0.569** | ND | ND | ND | ND | 0.015 | 0.059 |
| Benzo(g,h,i)perylene | 8270 | ND | ND | ND | 0.321 J | ND | ND | ND | ND | NE | 360 |
| Butylbenzylphthalate | 8270 | ND | ND | ND | ND | ND | ND | ND | ND | 260 | 150 |
| Chrysene | 8270 | ND | ND | ND | 0.672 | ND | ND | 0.0819 J | ND | 15 | 18 |
| 3,3-Dichlorobenzidine | 8270 | ND | ND | ND | ND | ND | ND | ND | ND | 1.1 | NE |
| 4,6-Dinitro-2-methylphenol | 8270 | ND | ND | ND | ND | ND | ND | ND | ND | 0.98 | NE |
| 2,4-Dinitrophenol | 8270 | ND | ND | ND | ND | ND | ND | ND | ND | 24 | NE |
| Fluoranthene | 8270 | 0.0768 J | ND | 0.0841 J | 1.980 | ND | ND | ND | ND | 460 | 330 |
| 4-Nitroaniline | 8270 | ND | ND | ND | ND | ND | ND | ND | ND | 24 | NE |
| 4-Nitrophenol | 8270 | ND | ND | ND | ND | ND | ND | ND | ND | NE | NE |
| Pentachlorophenol | 8270 | ND | ND | ND | ND | ND | ND | ND | ND | 0.89 | 0.031 |
| Pyrene | 8270 | ND | ND | ND | 1.030 | ND | ND | 0.0785 J | ND | 340 | 220 |
| Bis(2-Ethylhexyl)phthalate | 8270 | ND | ND | ND | ND | ND | ND | ND | ND | 35 | 7.2 |
| Phenanthrene | 8270 | ND | ND | ND | 0.843 | ND | ND | 0.0762 J | ND | NE | 57 |
| Anthracene | 8270 | ND | ND | ND | 0.273 J | ND | ND | ND | ND | 3400 | 660 |
| Dibenz(a,h)antracene | 8270 | ND | ND | ND | **0.174 J** | ND | ND | ND | ND | 0.015 | 0.19 |
| Indeno(1,2,3-cd)pyrene | 8270 | ND | ND | ND | **0.333 J** | ND | ND | ND | ND | 0.15 | 2.0 |
| Total TICs | 8270 | 1.931 | 0.739 | 0.7765 | 2.849 | 4.9756 | 0.756 | 3.6084 | 0.1041 | NE | NE |
| ***Total Metals by EPA Method 6010B*** | | | | | | | | | | | |
| Antimony | 6010 | 0.75 | ND | 0.58 | ND | ND | ND | 0.62 | **1.5** | 6.2 | 0.9 |
| Arsenic | 6010 | 4.2 | 0.71 | 1.4 | 2.3 | 0.32 J | 0.44 J | 1.1 | 1.4 | 4.4 | 5.8 |
| Beryllium | 6010 | 0.053 J | 0.047 J | 0.096 J | 0.072 J | ND | ND | 0.046 J | 0.070 J | 32 | 63 |
| Cadmium | 6010 | ND | ND | ND | ND | ND | ND | ND | 0.075 J | 14 | 3.0 |
| Chromium | 6010 | 2.2 | 5.4 | 34.4 | 2.6 | 0.70 | 0.71 | 2.7 | 3.2 | 24000 | 360000 |
| Copper | 6010 | 14.9 | 7.1 | 19.6 | 11.9 | 1.0 | 2.0 | 31.8 | 56.1 | 620 | 700 |
| Lead | 6010 | **1820** | 23.9 | **392** | 81.6 | 5.5 | 10 | 82.2 | 216 | 400 | 270 |
| Nickel | 6010 | 0.77 | 7.4 | 2.9 | 0.89 | ND | 0.35 J | 2.1 | 1.6 | 300 | 130 |
| Selenium | 6010 | ND | ND | ND | ND | ND | ND | ND | 0.51 J | 78 | 2.1 |
| Silver | 6010 | 0.14 J | 0.049 J | 0.16 J | 0.093 J | ND | ND | 0.10 J | 0.12 J | 78 | 3.4 |
| Thallium | 6010 | ND | ND | ND | ND | ND | ND | ND | ND | 1.0 | 0.28 |
| Zinc | 6010 | 18.1 | 14.4 | 74.2 | 27.0 | 8.3 | 2.3 | 37.7 | 79.1 | 4600 | 1200 |
| ***Mercury by EPA Method 7471*** | | | | | | | | | | | |
| Mercury | 7471 | 0.036 | 0.052 | 0.20 | 0.52 | 0.014 | 0.10 | 0.051 | 0.071 | 1.1 | NE |

Notes:

All concentrations are reported in milligrams per kilograms (mg/kg).

ft, bgs - feet below ground surface

NE - Not Established

NT - Not Tested

ND - Not Detected

IHSB - North Carolina Inactive Hazardous Sites Branch

**Bold** values exceed respective IHSB Heath-Based and/or Protection of Groundwater Soil Remediation Goals (SRG).

J Value indicates an estimated concentration above the adjusted method detection limit and below the adjusted reporting limit

**TABLE 4**

**GROUNDWATER ANALYTICAL RESULTS (MARCH/APRIL 2011)**
**R.D. PATE ESTATE**
**INCIDENT NUMBER: 7568**
**101 EAST MAIN STREET**
**PIKEVILLE, WAYNE COUNTY, NORTH CAROLINA**
**ENVIROASSESSMENTS, PLLC PROJECT NO. 07-7019.6**

| Sample ID | Analytical | MW-1 | MW-1D | MW-2 | MW-3 | MW-4 | MW-5 | MW-6 | MW-7 | MW-8 | MW-9 | North Carolina 2L Groundwater | Gross Contamination Levels for |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Collection Date | Method | 4/5/2011 | 4/5/2011 | 4/6/2011 | 4/1/2011 | 4/1/2011 | 3/30/2011 | 4/5/2011 | 4/1/2011 | 4/6/2011 | 4/6/2011 | Quality Standards | Groundwater |
| *Volatile Organic Compounds (VOCs) by EPA Method 8260B Plus TICs* | | | | | | | | | | | | | |
| Methyl tert-butyl ether (MTBE) | 8260B | ND | ND | 1.0 J | 0.52 J | ND | 1.4 | 0.66 J | ND | ND | ND | 20 | 20000 |
| 1,1,2,2-Tetrachloroethane | 8260B | **3.2** | **4.7** | ND | **0.74 J** | ND | **3.7** | ND | ND | **0.89 J** | **4.8** | 0.2 | 200 |
| Trichloroethene (TCE) | 8260B | 0.74 J | ND | ND | 0.72 J | ND | 1.1 | ND | ND | ND | ND | 3 | 3000 |
| Acetone | 8260B | ND | ND | 334 | ND | ND | ND | ND | ND | 41.0 | 13.8 J | 6000 | 6000000 |
| Toluene | 8260B | ND | ND | 112 | 0.83 J | ND | ND | ND | ND | 0 44 J | 0.53 J | 600 | 260000 |
| Benzene | 8260B | ND | ND | **946** | **21.1** | ND | ND | **3.1** | ND | **3.7** | **1.3** | 1 | 5000 |
| Dichlorodifluoromethane | 8260B | ND | ND | ND | 0.38 J | ND | ND | ND | ND | ND | ND | 0.4 | 400 |
| cis-1,2-Dichloroethene | 8260B | ND | ND | 17.6 | 1.0 | ND | ND | ND | ND | ND | ND | 70 | 70000 |
| trans-1,2-Dichloroethene | 8260B | ND | ND | 10.2 | 0.89 J | ND | ND | ND | ND | ND | ND | 100 | 100000 |
| Diisopropyl ether | 8260B | ND | ND | 57.8 | 20.9 | ND | ND | 8.7 | ND | 1.7 | ND | 70 | 70000 |
| Ethylbenzene | 8260B | ND | ND | **732** | 0.30 J | ND | ND | 3 6 | ND | 12 4 | 0.31 J | 600 | 84500 |
| Naphthalene | 8260B | 0.45 J | ND | **420** | 4.8 | ND | ND | **14.8** | ND | 2.2 | ND | 6 | 6000 |
| o-Xylene | 8260B | ND | ND | 99.5 | 1.1 | ND | ND | 0.24 J | ND | 1.0 | ND | 500 | 85500 |
| m&p-Xylene | 8260B | ND | ND | **1110** | ND | ND | ND | ND | ND | 27.9 | ND | 500 | 85500 |
| 1,2-Dichloroethane | 8260B | ND | ND | ND | ND | ND | ND | 0.14 J | ND | ND | ND | 0.4 | 400 |
| 2-Butanone (MEK) | 8260B | ND | ND | 98.0 | ND | ND | ND | ND | ND | 7.1 | ND | 4000 | 4000000 |
| 4-Methyl-2-pentanone (MIBK) | 8260B | ND | ND | ND | ND | ND | ND | ND | ND | 1.1 J | ND | NE | NE |
| 2-Chlorotoluene | 8260B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 100 | NE |
| 1,1,2-Trichloroethane | 8260B | ND | 1.3 | ND | ND | ND | ND | ND | ND | ND | ND | NE | NE |
| Vinyl chloride | 8260B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.03 | 30 |
| Chloroform | 8260B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 70 | 70000 |
| Tetrachloroethene (PCE) | 8260B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.7 | 700 |
| Bromodichloromethane | 8260B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.6 | NE |
| Dibromochloromethane | 8260B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.4 | 400 |
| Methylene Chloride | 8260B | ND | ND | **8.2 J** | ND | ND | ND | ND | ND | ND | ND | 5 | 5000 |
| Total TICs | 8260B | ND | ND | 4015.8 | 0.17775 | ND | ND | 282.42 | ND | 164.37 | ND | NE | NE |
| *Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270 Plus TICs* | | | | | | | | | | | | | |
| bis(2-Ethylhexyl)phthalate | 8270 | ND | ND | 1.9 J | ND | ND | 1.1 J | ND | ND | NT | NT | 3 | 170 |
| Naphthalene | 8270 | ND | ND | 155 | 2.5 J | ND | ND | 4.6 J | ND | NT | NT | 6 | 6000 |
| 1-Methylnaphthalene | 8270 | ND | ND | 17.2 | ND | ND | ND | 1.2 J | ND | NT | NT | NE | NE |
| 2-Methylnaphthalene | 8270 | ND | ND | 23.2 | ND | ND | ND | ND | ND | NT | NT | 30 | 12500 |
| Acenaphthene | 8270 | ND | ND | 1 9 J | ND | ND | ND | ND | ND | NT | NT | 80 | 2120 |
| Dibenzofuran | 8270 | ND | ND | 2 6 J | ND | ND | ND | ND | ND | NT | NT | 28 | 28000 |
| Fluorene | 8270 | ND | ND | 4.1 J | ND | ND | ND | ND | ND | NT | NT | 300 | 990 |
| Phenanthrene | 8270 | ND | ND | 4 4 J | ND | ND | ND | ND | ND | NT | NT | 200 | 410 |
| Total TICs | 8270 | 68.46 | 51.77 | 735.6 | 78.41 | 109.46 | 76 72 | 59.69 | ND | NT | NT | NE | NE |
| *Totals Metals by EPA Method 6010B* | | | | | | | | | | | | | |
| Antimony | 6010 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NE | NE |
| Arsenic | 6010 | ND | ND | 2.8 J | ND | ND | ND | ND | ND | ND | ND | 10 | NE |
| Beryllium | 6010 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NE | NE |
| Cadmium | 6010 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 2 | NE |
| Chromium | 6010 | ND | ND | ND | ND | 5.8 | ND | ND | ND | ND | ND | 10 | 10000 |
| Copper | 6010 | 7.5 | 4.7 J | ND | ND | 13.7 | 3.0 J | ND | 2.1 J | ND | 3.4 J | 1000 | NE |
| Lead | 6010 | ND | ND | ND | ND | 14.8 | ND | ND | ND | ND | ND | 15 | 15000 |
| Nickel | 6010 | ND | ND | ND | ND | 2 6 J | ND | ND | ND | 17.0 | 13.9 | 100 | NE |
| Selenium | 6010 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 20 | NE |
| Silver | 6010 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 20 | 20000 |
| Thallium | 6010 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NE | NE |
| Zinc | 6010 | 200 | 175 | 8.7 J | ND | 53.5 | 19.0 | 13 2 | 16.9 | 60.4 | 94.3 | 1000 | NE |
| *Mercury by EPA Method 7471* | | | | | | | | | | | | | |
| Mercury | 7471 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 1 | NE |

Notes:
All concentrations are reported in micrograms per liter (ug/L).
ft, bgs - feet below ground surface
NE - Not Established
NT - Not Tested
ND - Not Detected
NA - Not Applicable | * Type III Well | RB = Rinse Blank | TB = Trip Blank | D = Duplicate
**Bold** results exceed NCAC 2L Standards.
*Bold* results exceed Gross Contamination Levels (GCLs) for Groundwater.
"J" Value indicates an estimated concentration above the adjusted method detection limit and below the adjusted reporting limit

**TABLE 4**

**GROUNDWATER ANALYTICAL RESULTS (MARCH/APRIL 2011)**
**R.D. PATE ESTATE**
**INCIDENT NUMBER: 7568**
**101 EAST MAIN STREET**
**PIKEVILLE, WAYNE COUNTY, NORTH CAROLINA**
**ENVIROASSESSMENTS, PLLC PROJECT NO. 07-7019.6**

| Sample ID | Analytical | MW-10 | MW-11 | MW-12 | MW-13 | DW-2* | PWS | RB-MW-11 | TB-1 | TB-2 | TB-4 | North Carolina 2L Groundwater Quality | Gross Contamination Levels for |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Collection Date | Method | 4/5&6/2011 | 4/6/2011 | 4/6/2011 | 4/6/2011 | 4/1/2011 | 4/6/2011 | 3/31/2011 | 4/6/2011 | 4/6/2011 | 4/1/2011 | Standards | Groundwater |
| *Volatile Organic Compounds (VOCs) by EPA Method 8260B Plus TICs* | | | | | | | | | | | | | |
| Methyl tert-butyl ether (MTBE) | 8260B | ND | ND | 0.59 J | ND | ND | ND | ND | ND | ND | ND | 20 | 20000 |
| 1,1,2,2-Tetrachloroethane | 8260B | **7.4** | ***418*** | **47.3** | **19.9** | ND | ND | ND | ND | ND | ND | 0.2 | 200 |
| Trichloroethene (TCE) | 8260B | 0.55 J | **55.5** | **12.1** | **3.4** | ND | ND | ND | ND | ND | ND | 3 | 3000 |
| Acetone | 8260B | 10.7 J | 10.9 J | ND | 33.3 | ND | ND | 5.2 J | 11.7 J | 16.4 J | 13.4 J | 6000 | 6000000 |
| Toluene | 8260B | 0.28 J | 0.39 J | 1.2 | 0.75 J | ND | ND | 0.42 J | ND | ND | ND | 600 | 260000 |
| Benzene | 8260B | ND | ND | **75.0** | ND | ND | ND | ND | ND | ND | ND | 1 | 5000 |
| Dichlorodifluoromethane | 8260B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.4 | 400 |
| cis-1,2-Dichloroethene | 8260B | ND | 1.9 | 9.9 | ND | ND | ND | ND | ND | ND | ND | 70 | 70000 |
| trans-1,2-Dichloroethene | 8260B | ND | 0.97 J | 6.5 | ND | ND | ND | ND | ND | ND | ND | 100 | 100000 |
| Diisopropyl ether | 8260B | ND | ND | 3.3 | ND | ND | ND | ND | ND | ND | ND | 70 | 70000 |
| Ethylbenzene | 8260B | ND | ND | 16.9 | ND | ND | ND | ND | ND | ND | ND | 600 | 84500 |
| Naphthalene | 8260B | ND | ND | 2.6 | ND | ND | ND | ND | ND | ND | ND | 6 | 6000 |
| o-Xylene | 8260B | ND | ND | 3.0 | ND | ND | ND | ND | ND | ND | ND | 500 | 85500 |
| m&p-Xylene | 8260B | ND | ND | 3.3 | ND | ND | ND | ND | ND | ND | ND | 500 | 85500 |
| 1,2-Dichloroethane | 8260B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.4 | 400 |
| 2-Butanone (MEK) | 8260B | ND | ND | ND | ND | ND | ND | ND | 5.3 | 6.0 | ND | 4000 | 4000000 |
| 4-Methyl-2-pentanone (MIBK) | 8260B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | NE | NE |
| 2-Chlorotoluene | 8260B | ND | ND | 4.6 | ND | ND | ND | ND | ND | ND | ND | 100 | NE |
| 1,1,2-Trichloroethane | 8260B | ND | 2.5 | 0.79 J | ND | ND | ND | ND | ND | ND | ND | NE | NE |
| Vinyl chloride | 8260B | ND | ND | **1.4** | ND | ND | ND | ND | ND | ND | ND | 0.03 | 30 |
| Chloroform | 8260B | ND | 0.55 J | ND | ND | ND | 4.3 | ND | ND | 0.36 J | ND | 70 | 70000 |
| Tetrachloroethene (PCE) | 8260B | ND | **2.0** | ND | ND | ND | ND | ND | ND | ND | ND | 0.7 | 700 |
| Bromodichloromethane | 8260B | ND | ND | ND | ND | ND | **1.5** | ND | ND | ND | ND | 0.6 | NE |
| Dibromochloromethane | 8260B | ND | ND | ND | ND | ND | 0.71 J | ND | ND | ND | ND | 0.4 | 400 |
| Methylene Chloride | 8260B | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 5 | 5000 |
| Total TICs | 8260B | ND | ND | 145.42 | ND | ND | ND | ND | ND | ND | ND | NE | NE |
| *Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270 Plus TICs* | | | | | | | | | | | | | |
| bis(2-Ethylhexyl)phthalate | 8270 | NT | ND | ND | NT | ND | NT | NT | NT | NT | NT | 3 | 170 |
| Naphthalene | 8270 | NT | ND | ND | NT | ND | NT | NT | NT | NT | NT | 6 | 6000 |
| 1-Methylnaphthalene | 8270 | NT | ND | ND | NT | ND | NT | NT | NT | NT | NT | NE | NE |
| 2-Methylnaphthalene | 8270 | NT | ND | ND | NT | ND | NT | NT | NT | NT | NT | 30 | 12500 |
| Acenaphthene | 8270 | NT | ND | ND | NT | ND | NT | NT | NT | NT | NT | 80 | 2120 |
| Dibenzofuran | 8270 | NT | ND | ND | NT | ND | NT | NT | NT | NT | NT | 28 | 28000 |
| Fluorene | 8270 | NT | ND | ND | NT | ND | NT | NT | NT | NT | NT | 300 | 990 |
| Phenanthrene | 8270 | NT | ND | ND | NT | ND | NT | NT | NT | NT | NT | 200 | 410 |
| Total TICs | 8270 | NT | 163.8 | 113.23 | NT | 86.6 | NT | NT | NT | NT | NT | NE | NE |
| *Totals Metals by EPA Method 6010B* | | | | | | | | | | | | | |
| Antimony | 6010 | ND | ND | ND | ND | ND | NT | NT | NT | NT | NT | NE | NE |
| Arsenic | 6010 | ND | ND | ND | ND | ND | NT | NT | NT | NT | NT | 10 | NE |
| Beryllium | 6010 | ND | ND | ND | ND | 4.1 | NT | NT | NT | NT | NT | NE | NE |
| Cadmium | 6010 | ND | ND | ND | ND | ND | NT | NT | NT | NT | NT | 2 | NE |
| Chromium | 6010 | 4.6 J | ND | ND | ND | ND | NT | NT | NT | NT | NT | 10 | 10000 |
| Copper | 6010 | 4.3 J | 3.4 J | ND | ND | 17.0 | NT | NT | NT | NT | NT | 1000 | NE |
| Lead | 6010 | ND | ND | ND | ND | ND | NT | NT | NT | NT | NT | 15 | 15000 |
| Nickel | 6010 | 21.4 | 7.3 | 7.8 | 13.5 | ND | NT | NT | NT | NT | NT | 100 | NE |
| Selenium | 6010 | ND | ND | ND | ND | ND | NT | NT | NT | NT | NT | 20 | NE |
| Silver | 6010 | ND | ND | ND | ND | ND | NT | NT | NT | NT | NT | 20 | 20000 |
| Thallium | 6010 | ND | ND | ND | ND | ND | NT | NT | NT | NT | NT | NE | NE |
| Zinc | 6010 | 86.6 | 31.8 | 45.3 | 32.0 | 56.2 | NT | NT | NT | NT | NT | 1000 | NE |
| *Mercury by EPA Method 7471* | | | | | | | | | | | | | |
| Mercury | 7471 | ND | ND | ND | ND | ND | NT | NT | NT | NT | NT | 1 | NE |

Notes
All concentrations are reported in micrograms per liter (ug/L).
ft, bgs - feet below ground surface
NE - Not Established
NT - Not Tested
ND - Not Detected
NA - Not Applicable * Type III Well RB = Rinse Blank TB = Trip Blank D = Duplicate
**Bold** results exceed NCAC 2L Standards.
***Bold*** results exceed Gross Contamination Levels (GCLs) for Groundwater
"J" Value indicates an estimated concentration above the adjusted method detection limit and below the adjusted reporting limit

REC PROGRAM DOCUMENT CERTIFICATION FORM - PAGE 2 OF 2
IHSB SITE NAME R.D. Pate Estate
DATE & NAME OF DOCUMENT May 9, 2011/Quarterly Progress Report
TYPE OF SUBMITTAL (circle all that apply) (Report,) Workplan, Work Phase Comp. Statement, Schedule Change

## REGISTERED SITE MANAGER CERTIFICATION OF SIGNATURES

As the Registered Environmental Consultant for the Site for which this filing is made, I certify that the signatures included herewith are genuine and authentic original handwritten signatures and/or true, accurate, and complete copies of the genuine and authentic original handwritten signatures of the persons who purport to sign for this filing. I further certify that I have collected through reliable means the originals and/or copies of said signatures from the persons authorized to sign for this filing who, in fact, signed the originals thereof. Those persons and I understand and agree that any copies of signatures have the same legally binding effect as original handwritten signatures, and I certify that any person for whom I am submitting a copy of their signature has provided me with their express consent to submit said copy. Additionally, I certify that I am authorized to attest to the genuineness and authenticity of the signatures, both originals and any copies, being submitted herewith and that by signing below, I do in fact attest to the genuineness and authenticity of all the signatures, both originals and copies, being submitted for this filing.

Gary K. Sawyer
Name of Registered Site Manager

Signature of Registered Site Manager

5-19-2011
Date

## REGISTERED SITE MANAGER DOCUMENT CERTIFICATION STATEMENT (.0306(b)(1))

"I certify under penalty of law that I am personally familiar with the information contained in this submittal, including any and all supporting documents accompanying this certification, and that the material and information contained herein is, to the best of my knowledge and belief, true, accurate and complete and complies with the Inactive Hazardous Sites Response Act G.S. 130A-310, et seq, and the remedial action program Rules 15A NCAC 13C .0300. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information."

Gary K. Sawyer
Name of Registered Site Manager

Signature of Registered Site Manager

5-19-2011
Date

### NOTARIZATION

NC (Enter State)

UNION COUNTY

I, Elizabeth J Hornbuckle, a Notary Public of said County and State, do hereby certify that Gary Sawyer did personally appear and sign before me this day, produced proper identification in the form of NCDL, was duly sworn or affirmed, and declared that, he or she is the duly authorized environmental consultant of the remediating party of the property referenced above and that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certifications is true and accurate, and he or she then signed these Certifications in my presence.

WITNESS my hand and official seal this 19th day of May, 2011.

Elizabeth J Hornbuckle
Notary Public (signature)

(OFFICIAL SEAL)

My commission expires: April 7, 2014

*Document Certification Form No. DC - II*
*(Revised 3/11)*

REC PROGRAM DOCUMENT CERTIFICATION FORM - PAGE 1 OF 2
IHSB SITE NAME R.D. Pate Estate
DATE & NAME OF DOCUMENT May 9, 2011/Quarterly Progress Report
TYPE OF SUBMITTAL (circle all that apply): (Report) Workplan, Work Phase Comp. Statement, Schedule Change

## REMEDIATING PARTY DOCUMENT CERTIFICATION STATEMENT (.0306(B)(2))

"I certify under penalty of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material and information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information."

Branch Banking + Trust Co., Trustee
Environmental Risk officer, Cindi Lewis
Name of Remediating Party

Signature of Remediating Party

5/18/2011
Date

**NOTARIZATION**

North Carolina (Enter State)
Mecklenburg COUNTY

I, J Tyler Petty, a Notary Public of said County and State, do hereby certify that Cindi Lewis did personally appear and sign before me this day, produced proper identification in the form of NCDL, was duly sworn or affirmed, and declared that, he or she is the duly authorized environmental consultant of the remediating party of the property referenced above and that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certifications is true and accurate, and he or she then signed these Certifications in my presence.

WITNESS my hand and official seal this 18 day of May, 2011.

J Tyler Petty
Notary Public (signature)

(OFFICIAL SEAL)

My commission expires: Nov. 17, 2011

*Document Certification Form No. DC - I*
*(Revised 3/11)*

**Macdonald, Janet K**

REC-LEAD

**To:** gsawyer@enviroassessments.com
**Cc:** WCrews@BBandT.com
**Subject:** R. D. Pate Estate site in REC Program

Re: R.D. Pate Estate (NONCD0002795) 2/3/11
Dear Mr. Sawyer: Courtesy e-mail of R1 Report deadline jm

This e-mail serves as a courtesy reminder regarding the REC Program requirements. A Registered Environmental Consultant (REC) Administrative Agreement (AA) was executed for the above referenced site on June 11, 2008. As indicated in the AA and the REC Rules, quarterly summaries must be submitted, and the remedial investigation must be completed at the site within three years of the effective date of the agreement. For this site, all field activities for the remedial investigation must be complete and the findings included in a certified final remedial investigation report on or before June 11, 2011. For sites which fail to meet the deadline, the AA between the Remediating Party (RP) and the Division may be dissolved and the site transferred from the Responsible Party Voluntary Remedial Action category to the Sites Priority List category of the Inactive Hazardous Sites Inventory. The RP and REC at these sites may also be subject to enforcement action. Please review the AA, REC Rules, and the REC Implementation Guidance for additional information.

If you have any questions, please feel free to call me at (919) 508-8446.

Sincerely,

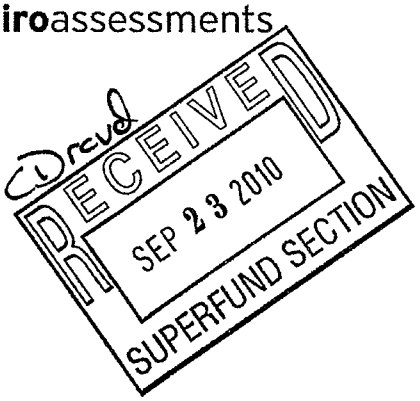
*Janet*

Janet K. Macdonald, P.G.
Inactive Hazardous Sites Branch - REC Program
NCDENR - Division of Waste Management
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605
Phone: (919) 508-8446
Fax: (919) 733-4811
e-mail: jkmacdonald@ncdenr.gov
http://portal.ncdenr.org/web/wm/sf/ihs/recprogram

***Please note the change in e-mail address.***

9307 Monroe Road, Suite K
Charlotte, North Carolina 28270
T 704.846.8853 F 704.846.3271
enviroassessments.com

enviroassessments




REC-LEAD

September 22, 2010

Mr. Kim Caulk, P.G.
Inactive Hazardous Sites Branch - REC Program
NCDENR - Division of Waste Management
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605

Reference: Submittal of a Remedial Investigation Workplan
**R.D. Pate Estate – NONCD0002795**
101 East Main Street
Pikeville, Wayne County, North Carolina 27863
EA Project No. 07-7019.5

Dear Mr. Rodgers:

On behalf of BB&T and EnviroAssessments (EA), please find the attached Remedial Investigation Workplan for the referenced site. I have also included a CD with an electronic copy. The original certification statements are attached in the hard copy report, and copies are attached to this letter.

Going forward, we will provide the appropriate reports and/or quarterly progress reports as required by IHSB guidelines.

We appreciate your continued assistance with this project. Please call the undersigned at (980) 722-3901 if you have any questions.

Sincerely,

**EnviroAssessments**

Gary K. Sawyer, P.G., RSM
Principal

North Carolina Department of Environment
and Natural Resources
Division of Waste Management
Superfund Section
Inactive Hazardous Sites Branch

**REMEDIATING PARTY DOCUMENT CERTIFICATION STATEMENT** (.0306(b)(2)):

"I certify under penalty of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material and information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information."

Branch Banking + Trust Co, Trustee
Cindi M. Lewis, AVP - BB&T - Environmental Risk Officer
(Name of Remediating Party Official)

* _____ * 9/17/2010
(Signature of Remediating Party Official) Date

North Carolina (Enter State)

Union **COUNTY**

I, Kimberly L. Gray, a Notary Public of said County and State, do hereby certify that Cindi Lewis did personally appear and sign before me this day, produced proper identification in the form of driver license, was duly sworn or affirmed, and declared that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certification is true and accurate, and he or she then signed this Certification in my presence.

WITNESS my hand and official seal this 17 day of September, 2010.

Kimberly L. Gray
Notary Public (signature)

(OFFICIAL SEAL)

My commission expires: January 27, 2013

North Carolina Department of Environment
and Natural Resources
Division of Waste Management
Superfund Section
Inactive Hazardous Sites Branch

**REGISTERED SITE MANAGER DOCUMENT CERTIFICATION STATEMENT** (.0306(b)(1)):

"I certify under penalty of law that I am personally familiar with the information contained in this submittal, including any and all supporting documents accompanying this certification, and that the material and information contained herein is, to the best of my knowledge and belief, true, accurate and complete and complies with the Inactive Hazardous Sites Response Act G.S. 130A-310, et seq, and the remedial action program Rules 15A NCAC 13C .0300. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information."

Gary K. Sawyer
(Name of Registered Site Manager)

* _____ * 09-22-2010
(Signature of Registered Site Manager) Date

North Carolina (Enter State)

Union **COUNTY**

I, Kimberly L. Gray, a Notary Public of said County and State, do hereby certify that Gary K. Sawyer did personally appear and sign before me this day, produced proper identification in the form of drivers license, was duly sworn or affirmed, and declared that, he or she is the duly authorized environmental consultant of the remediating party of the property referenced above and that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certification is true and accurate, and he or she then signed this Certification in my presence.

WITNESS my hand and official seal this 22 day of September, 2010.

Kimberly L. Gray
Notary Public (signature) (OFFICIAL SEAL)

My commission expires: 1/27/2013

*Document Certification Form No. DC - II*

DWM

9307 Monroe Road, Suite K
Charlotte, North Carolina 28270
T 704.846.8853 F 704.846.3271
enviroassessments.com

enviroassessments

**BB&T ESA071433**
**BB&T Acct. Name: R.D. Pate Estate**

REC-LEAD
Dwd
RECEIVED
JUL 19 2010
SUPERFUND SECTION

July 15, 2010

J. Keith Rodgers, P.G.
Inactive Hazardous Sites Branch - REC Program
NCDENR - Division of Waste Management
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605

Reference: Submittal of a Remedial Investigation Workplan
**R.D. Pate Estate – NONCD0002795**
101 East Main Street
Pikeville, Wayne County, North Carolina 27863
EA Project No. 07-7019.5

Dear Mr. Rodgers:

On behalf of BB&T and EnviroAssessments (EA), please find the attached Remedial Investigation Workplan for the referenced site. I have also included a CD with an electronic copy.

Going forward, we will provide the appropriate reports and/or quarterly progress reports as required by IHSB guidelines.

We appreciate your continued assistance with this project. Please call the undersigned at (980) 722-3901 if you have any questions.

Sincerely,

**EnviroAssessments**

Gary K. Sawyer, P.G., RSM
Principal

NORTH CAROLINA LICENSED SEAL 1337 GEOLOGIST GARY K. SAWYER

REC-LEAD

**Caulk, Kim**

**From:** Crews, Will [WCrews@BBandT.com]
**Sent:** Wednesday, April 22, 2009 3:31 PM
**To:** Caulk, Kim
**Subject:** R. D. Pate account REC Program

Mr. Caulk,

Please change the contact information on the R. D. Pate account to the information below. Thanks.

*William S. Crews*
*Assistant Vice President*
Personal Trust Specialist
BB&T Wealth Management
223 West Nash Street
Wilson, NC 27893
Phone (800) 682-6902, ext 64935
Fax (252) 246-4850
Email wcrews@bbandt.com

EnviroAssessments

Property Transaction Assessments
Environmental / Geological Investigations
Asbestos / Mold / Wetlands Surveys

9307 Monroe Road, Suite K
Charlotte, NC 28270
Office: (704) 846-8853
Fax: (704) 846-3271



# OCTOBER 2008 PROGRESS REPORT

## FOR

## R.D. PATE ESTATE SITE

**101 East Main Street**
**Pikeville, Wayne County, North Carolina**



**Site ID No. NONCD0002795**
**Latitude: 35° 29' 51.4681" North Longitude: 77° 58' 59.9161" West**

**October 15, 2008**

**REMEDIATOR**

Ms. Pamela Watson, Vice President
Branch Banking & Trust Company
Wealth Management Division
P. O. Box 2907
223 West Nash Street
Wilson, North Carolina 27894-2907
(252) 246-4027

**REGISTERED ENVIRONMENTAL CONSULTANT**

EnviroAssessments, PLLC
Gary K. Sawyer, RSM
9307 Monroe Rd., Suite K
Charlotte, North Carolina 28270
(704) 846-8853

Inactive Hazardous Sites Branch – REC Program
NCDENR - Division of Waste Management
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605

Attention: Mr. Kim Caulk
REC Program Manager

Reference: October 2008 Progress Report
**R. D. Pate Estate Site**
101 East Main Street
Pikeville, Wilson County, NC
Site ID No. NONCD0002795

Dear Mr. Caulk:

On behalf of BB&T, EnviroAssessments, PLLC (EA) is pleased to present this October 2008 Progress Report the R. D. Pate Estate property ("the Project"). The October 2008 Progress Report is provided to address the requirements set forth in Section III.E of the REC Administrative Agreement for the Project, dated June 11, 2008.

EA is currently working towards completion of the Remedial Investigation Workplan for the Project. The site was recently surveyed by a professional land surveyor and EA is awaiting receipt of the site map. The Remedial Investigation Workplan will be submitted to your attention as part of the January 2009 Progress Report. Work at the Project is progressing in a manner to achieve the mandatory work phase completion deadlines set out in 15A NCAC 13C .0302(h).

Kim Caulk

919.508.8400

**Remediator Certification:**

I, Pamela Watson, certify that, to the best of my knowledge, after thorough investigation, the information contained in or accompanying this certification is true, accurate, and complete.

NORTH CAROLINA
Wilson COUNTY

I certify that the following person personally appeared before me this day, acknowledging to me that he or she signed the foregoing document: Pamela Watson.

Date: 12-2-08

(Official Seal)

MELISSA ROBERTS NOTARY PUBLIC WILSON COUNTY, NC

Melissa Roberts
Notary's printed or typed name
Notary Public Melissa Roberts

My commission expires:
06-26-2010

**REC Certification:**

I, _____, certify that, to the best of my knowledge, after thorough investigation, the information contained in or accompanying this certification is true, accurate, and complete.

NORTH CAROLINA
Union COUNTY

I certify that the following person personally appeared before me this day, acknowledging to me that he or she signed the foregoing document: Gary Sawyer.

Date: Dec. 17, 2008

Kimberly L. Gray
Notary's printed or typed name
Notary Public

(Official Seal)

My commission expires:
January 27, 2013

Thank you for your continued assistance with this Project. Please call the undersigned at (980) 722-0908 if you have any questions.

Sincerely,

**EnviroAssessments, PLLC**

Jeremy Odom
Project Manager

Attachments

**Subject:** Re: R. D. Pate Estate Site - Site ID No. NONCD0002795
**From:** "Kim T. Caulk" <Kim.Caulk@ncmail.net>
**Date:** Thu, 16 Oct 2008 10:14:22 -0400
**To:** Gary Sawyer <gsawyer@enviroassessments.com>

REC-LEAD

ok.

Kim T. Caulk, P.G.
Inactive Hazardous Sites Branch - REC Program
NCDENR - Division of Waste Management
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605
Phone: (919) 508-8451
Fax: (919) 733-4811
e-mail: kim.caulk@ncmail.net

Gary Sawyer wrote:

> Kim,
>
> I wanted to give you an update regarding the REC Administrative Agreement for the following site:
>
> R. D. Pate Estate Site
>
> Pikeville, Wilson County , NC
>
> Site ID No. NONCD0002795
>
> My Project Manager, Jeremy Odom , spoke with you yesterday morning regarding the October 2008 Progress Report for the R. D. Pate site. We have been finishing up the Remedial Investigation Workplan and are currently waiting to have the site surveyed by a North Carolina Surveyor. This task should be complete within one week. We have typed up a quick summary letter to your attention stating that the Workplan is almost complete. After our client signs and notarizes the summary letter, I will certify the document as RSM and we will overnight it to your attention. Jeremy informed me that the Remedial Investigation Workplan, once complete, can be submitted as the January 2009 Progress Report.
>
> Thanks for your continued assistance with this project,
>
> *Gary K. Sawyer, PG, RSM*
>
> *Principal*
>
> *EnviroAssessments*

NCDENR
North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director | **Division of Waste Management** | Michael F. Easley, Governor
William G. Ross Jr., Secretary

June 11, 2008

Ms. Pamela Watson
BB&T
Personal Trust Specialist
Wealth Management Division
223 West Nash Street
Wilson, NC 27893-3801

STATEWIDE

REC-LEAD

Re: Executed REC Administrative Agreement
R. D. Pate Estate Site
Pikeville, Wilson County, NC
Site ID No. NONCD0002795

Dear Ms. Watson:

I have attached a copy of the executed Registered Environmental Consultant (REC) Administrative Agreement (AA) for the above referenced site. The effective date of the AA is June 11, 2008. By signing the AA, both the Remediator, R. D. Pate Estate/Trust, and the REC, EnviroAssessments, PLLC have acknowledged that the REC is fully accountable for complying with 15A NCAC 13C .0300 including the deadlines that are established upon execution of this AA and the standards of conduct for RECs in Section .0305(b). The first quarterly letter status report required by Section III.E of the AA is due October 15, 2008.

If you have any questions, please feel free to contact me.

Sincerely,

Kim T. Caulk
REC Program
Inactive Hazardous Sites Branch
Superfund Section

Enclosure

cc: Mr. Gary Sawyer, EnviroAssessments (w/ enclosure)

1646 Mail Service Center, Raleigh, North Carolina 27699-1646
Phone 919-508-8400 \ FAX 919-715-3605 \ Internet http://wastenotnc.org

NORTH CAROLINA DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT
SUPERFUND SECTION

STATE-LEAD

IN RE: R. D. PATE ESTATE
NCDNONCD0002795
PIKEVILLE, NORTH CAROLINA
WAYNE COUNTY

ADMINISTRATIVE AGREEMENT
FOR REGISTERED ENVIRONMENTAL
CONSULTANT-DIRECTED ASSESSMENT
AND REMEDIAL ACTION PURSUANT TO
N.C.G.S. 130A-310.9(c) and 15A NCAC 13C .0300.

REC-LEAD

DOCKET NUMBER 08-SF-236

## I. STATEMENT OF PURPOSE

The purpose of this Administrative Agreement (Agreement) is to provide for implementation by R. D. Pate Estate/Trust (the Remediator) of a voluntary remedial action program pursuant to N.C.G.S. 130A-310.9(c) and 15A NCAC 13C .0300 at the site defined in Section II. A. of this Agreement.

## II. STIPULATIONS OF FACT

A. The "Site" is the property currently owned by Richard David Pate at 101 East Main Street, Pikeville, Wayne County, North Carolina and any additional area which has become contaminated as a result of hazardous substances or waste disposed or discharged at that property.

B. The Site is an inactive hazardous substance or waste disposal site within the meaning of N.C.G.S. 130A-310(3).

## III. WORK TO BE PERFORMED

A. The Remediator shall conduct a voluntary remedial action at the Site in accordance with the provisions of N.C.G.S. 130A-310.9(c), 15A NCAC 13C .0300, and the "Registered Environmental Consultant Program Implementation Guidance" of the North Carolina Division of Waste Management (the Division). The voluntary remedial action shall include the remediation of any hazardous substances as defined in G.S. 130A-310(2) and any contaminants as defined in 15A NCAC 2L present at the Site.

B. Within thirty-six (36) months after the execution of this Agreement, the Remediator shall complete a remedial investigation at the Site which complies with the provisions of 15A NCAC 13C .0300 including, but not limited to, .0302(f), .0302(k)-(p), .0306(c)-(h) and .0306(q). For any requirement that has already been met, the Remediator shall specify the location within the document(s) on file with the Superfund Section that show(s) that the requirement has been met. The remedial investigation shall not be considered complete until the Remediator has submitted a remedial investigation report and completion statement, both certified in accordance with .0306(b) by the REC and the Remediator.

C. Within twenty-four (24) months of completion of the remedial investigation or within sixty (60) months after the execution of this Agreement, whichever is earlier, the Remediator shall begin operation of the remedial action system for groundwater at the Site in compliance with the provisions of 15A NCAC 13C .0300 including, but not limited to, .0302(f), .0302(k) - (p), .0306(c) - (d) and .0306(i) - (n). For any requirement that has already been met, the Remediator shall specify the location within the document(s) on file with the Superfund Section that show(s) that the requirement has been met. Operation of the remedial action system for groundwater shall be considered to have begun only upon the submission to the Division of the groundwater remedial action construction completion report, certified in accordance with .0306(b) by the REC and the Remediator, and upon commencement of the actual operation of the remedial system.

D. Within ninety-six (96) months after the execution of this Agreement, the Remediator shall complete, for wastes, soils, surface water and sediments at the Site, a remedial action which complies with the provisions of 15A NCAC 13C .0300 including, but not limited to, .0302(f), .0302(k) - (p), .0306(c) - (d), .0306(i) - (n) and .0308. For any requirement that has already been met, the Remediator shall specify the location within the document(s) on file with the Superfund Section that show(s) that the requirement has been met. The remedial action for wastes, soils, surface water and sediments shall not be considered complete until the Remediator has submitted, for these media, a remedial action completion report and work phase completion statement, both certified in accordance with .0306(b) by the REC and the Remediator.

E. The Remediator shall submit quarterly letter status reports on or before the 15th day of January, April, July and October of each year until such time as the REC has prepared and submitted certified completion statements for all contaminated media pursuant to 15A NCAC 13C .0306(b)(5)(D). Each quarterly status report must summarize, in one to two paragraphs, work performed since the last quarterly status report. These status reports must include a statement confirming work is progressing in a manner to achieve the mandatory work phase completion deadlines set out in 15A NCAC 13C .0302(h). These status reports must be certified in accordance with .0306(b) by the REC assigned to this project and the Remediator. A quarterly letter status report may be incorporated with another document such as a remedial

investigation work plan, a remedial investigation report, a remedial action plan, etc. if such other document is submitted at the time when a quarterly letter status report is due. Once the REC has prepared and submitted certified completion statements for all contaminated media pursuant to 15A NCAC 13C .0306(b)(5)(D), quarterly letter status reports under this paragraph shall be supplanted with the requirements of progress reporting of remedial action implementation pursuant to 15A NCAC 13C .0306(o).

F. If there is groundwater contamination at the Site, the Remediator shall install and monitor sentinel groundwater monitoring wells such that groundwater monitoring data obtained from the monitoring activities will accurately monitor the migration of any contamination at the Site toward any drinking water or production water well that is known to be present within a one-thousand (1000) feet of the detectible perimeter of the groundwater contamination at the Site. The Remediator shall notify the Division within twenty-four (24) hours of the time when the Remediator or the Remediator's REC discovers that a sentinel groundwater monitoring well has detectable concentrations of any contamination.

G. After completing the inventory of all identifiable wells used as sources of potable water pursuant to 15A NCAC 13C .0306(g)(6), if any new drinking water wells are installed within one-thousand five-hundred (1500) feet of the Site property boundaries, the Remediator and/or the Remediator's REC shall notify the Division within twenty-four (24) hours of the time when the Remediator and/or the Remediator's REC discovers or otherwise finds out about such wells during the normal course of work for the project.

H. If hazardous substances as defined in G.S. 130A-310(2) or other contaminants as defined in 15A NCAC 2L present at the Site have affected any drinking water wells, the Remediator shall, within a time period established by the Division, provide an alternate drinking water source for users of those wells.

I. The Remediator shall ensure that remedial action progress reports are prepared in accordance with 15A NCAC 13C .0306(o).

## IV. ADDITIONAL PROVISIONS

A. All work performed pursuant to this Agreement shall be under the direction and supervision of the Division-approved REC specified in Attachment A, in accordance with 15A NCAC 13C .0302(f).

B. All work plans, reports, completion statements and project schedules prepared pursuant to this Agreement shall be certified by a representative of the Remediator in accordance with 15A NCAC 13C .0306(a) and .0306(b)(2).

C. In the event that the REC specified in Attachment A ceases to serve in that capacity at the Site or is disqualified as an REC by the Division, the Remediator's voluntary

remedial action status shall be subject to revocation if the Remediator fails to propose a replacement REC within sixty (60) days, in accordance with 15A NCAC 13C .0302(n).

D. The Remediator shall pay an annual administration fee to the Division, in accordance with 15A NCAC 13C .0307(c), to help offset the costs of the Division's audits of voluntary remedial actions.

E. The Remediator is responsible for obtaining all necessary registrations, permits and approvals in accordance with 15A NCAC 13C .0306(m)(3).

F. The Remediator and its REC shall preserve, for at least six (6) years after termination of this Agreement, all records and documents in its possession or in the possession of its divisions, employees, agents, accountants, contractors or attorneys which relate in any way to this Agreement. After this six (6)-year period, the Remediator shall notify the Division at least thirty (30) days prior to the destruction of any such records and documents. The Remediator shall comply with any written request by the Division, prior to the day for which destruction is scheduled, to continue to preserve such records and documents or to provide them to the Division. The Remediator may assert any available right to confidentiality regarding particular records and documents, other than analytical data. Pursuant to 15A NCAC 13C .0302(m) the REC must maintain all such records and documents beyond the six (6) year period unless it receives Division approval for destruction.

G. In the event that the Agreement is terminated, the Remediator and/or REC shall, within thirty (30) days, submit to the Division a summary report that includes all information and data that has been collected pursuant to 15A NCAC 13C .0306(h), (n), (o), or (p). Certification of the report shall be provided in accordance with 15A NCAC 13 C .0306(b)(1) and (2).

The effective date of this Agreement shall be the date on which it is executed by Jack R. Butler.

Date Executed: June 11, 2008

By: Jack R. Butler

Jack R. Butler, P.E.
Chief, Superfund Section
Division of Waste Management
North Carolina Department of Environment
and Natural Resources

Branch Banking and Trust Co., Executor and Trustee

By: By: Pamela Watson, Vice President
(Signature of Party Authorized to Bind Remediator)

Pamela Watson, Vice President
(Typed or Printed Name of Signatory, Title)

Branch Banking and Trust Co.
(Typed or Printed Name of Company)

**North Carolina Department of Environment and Natural Resources**
**Division of Waste Management**
**Superfund Section**

**Attachment A to**
**Administrative Agreement for Registered Environmental Consultant-Directed Assessment and Remedial Action Pursuant to N.C.G.S. 130A-310.9(c) and 15A NCAC 13C .0300.**

**Docket No.** 08 **-SF-** 23le

We hereby certify that the Remediator has retained the undersigned Division-approved Registered Environmental Consultant (REC) to implement and oversee a voluntary remedial action at the Site pursuant to N.C.G.S. 130A-310.9(c) and 15A NCAC 13C .0300, and that the undersigned Division-approved Registered Site Manager (RSM) shall serve as RSM for the voluntary remedial action.

The undersigned Remediator and REC agree to indemnify and save and hold harmless the State of North Carolina and its agencies, departments, officials, agents, employees, contractors and representatives, from any and all claims or causes of action arising from or on account of acts or omissions of the Remediator or REC or their officers, employees, receivers, trustees, agents or assigns in carrying out actions required pursuant to the Agreement which incorporates this Attachment A (this Agreement). Neither the State of North Carolina nor any agency or representative thereof shall be held to be a party to any contract involving the Remediator relating to the Site excluding, however, this Agreement.

The Remediator affirms that the REC has been provided a full and complete copy of this Agreement prior to signature. The undersigned REC representatives affirm that they have received, read, and intend to comply with the provisions of this Agreement. Both the Remediator and REC acknowledge that the REC is fully accountable for complying with 15A NCAC 13C .0300 including the deadlines established upon execution of this Agreement.

**Remediator:**
Branch Banking and Trust Co., Executor and Trustee
By: Pamela L Watson, Vice President 05/15/08
(Signature Party Authorized to Bind Remediator) (Date)

Pamela Watson, Vice President
(Typed or Printed Name of Signatory, Title)

Branch Banking and Trust Co.
(Typed or Printed Name of Company)

**Registered Environmental Consultant:**

5-15-08
(Signature of REC Owner, Partner, or Corporate Officer) (Date)

GARY K. SAWYER, P.G.
(Typed or Printed Name of Signatory, Title)

ENVIROASSESSMENTS
(Typed or Printed Name of REC Firm)

**Registered Site Manager:**

5-15-08
(RSM Signature) (Date)

Gary K. Sawyer, P.G.
(Typed or Printed Name of RSM)

ORIGINAL - SIGNED

EnviroAssessments

Property Transaction Assessments
Environmental / Geological Investigations
Asbestos / Mold / Wetlands Surveys

9307 Monroe Road, Suite K
Charlotte, NC 28270
Office: (704) 846-8853
Fax: (704) 846-3271

**BB&T ESA071433**
**BB&T Acct. Name: R.D. Pate Estate**

May 14, 2008

STATE FILE

Branch Banking & Trust Company
Wealth Management Division
P. O. Box 2907
223 West Nash Street
Wilson, North Carolina 27894-2907

Attention: Ms. Pamela Watson, Vice President
Personal Trust Specialist

Reference: Proposal to Provide Environmental Services
**R.D. Pate Estate**
101 East Main Street
Pikeville, Wayne County, North Carolina 27863
EA Proposal No. P08-1892-7019.4

Dear Ms. Watson:

On behalf of EnviroAssessments, PLLC (EA), I am pleased to present this proposal to provide environmental services at the referenced site. The proposed scope of services is provided to address the open contamination incident by chlorinated solvents.

In summary, the site the subject of an "open" chlorinated solvent release incident **(Incident No. 7568)** that has been partially addressed under the state's risk-based corrective action rules. The chlorinated solvent contamination in groundwater at the Project appears to be a result of releases from past on-site operations.

EA understands that BB&T has a security or Trust interest in the property which is the suspected source of the chlorinated solvent contamination at the Project site. The extent of the chlorinated solvent contamination in groundwater has not been completely defined, and past soil assessment activities have not yet identified any areas on-site which are suspected to contain soil contaminated by chlorinated solvents. However, additional soil assessment activities will be required to further evaluate any potential on-site sources of the contamination.

In accordance with current guidelines, the chlorinated solvent release incident must be addressed under the direction of the NCDENR's Inactive Hazardous Sites Branch (IHSB). Specifics of the IHSB Program have been provided to you as an attachment to this letter. In order to further address the chlorinated compound release incident to a "closed" and "de-listed" status, further assessment and remediation must be conducted in accordance with the technical and administrative requirements for site assessments and site cleanups pursuant

to the Inactive Hazardous Sites Response Act of 1987 (N.C.G.S. 130A-310 *et.seq.*). The state's statute provides site owners, operators, lenders, developers and responsible parties (collectively referred to as "remediating parties") the opportunity to voluntarily clean up sites pursuant to administrative agreements with the state's Division of Waste Management. In order to address limitations in Division staff resources, subsequent amendments to the Act authorized the Division to approve qualified, private environmental consulting firms to certify remedial action compliance in place of state oversight. This new program is known as the Registered Environmental Consultant (REC) Program, the governing rules of which are found at 15A NCAC 13C.0300.

Following are EA's proposed recommendations to address this Property under the REC program guidelines. The recommendations are based on presently-available data and on EA's experience at similar sites. The Client should be advised that site conditions may be encountered that could significantly affect the recommended scope of work and costs.

1) Branch Notification and Review of REC Program Eligibility

EA has notified the Inactive Hazardous Sites Branch (the "Branch") of the Client's desire to conduct voluntary remedial actions, and EA has prepared and submitted the Checklist for REC Program Eligibility, along with prior environmental investigative documents. The Branch has determined that the site meets eligibility conditions for the REC program.

2) Preparation and Implementation of a Remedial Investigation Plan

EA will complete a remedial investigation plan, the purpose of which is to (i) identify all releases of hazardous substances to the environment, (ii) to identify potential exposure pathways, (iii) to characterize the chemical nature of such releases and collect sufficient sampling data to support a cleanup-level determination, (iv) to delineate the areal and vertical extent of contamination, and (v) to characterize site conditions sufficiently to conduct a feasibility study of remedial alternatives and to support a proposed remedy.

This phase involves a detailed geological investigation of the site, some of which is already in progress. Additional work will likely include installation of additional on-site and/or off-site monitoring wells, contaminant distribution studies, and groundwater flow modeling. The purpose is to investigate for on-site and off-site point sources of the contamination, evaluate for off-site migration of contaminants and to establish a risk level regarding potential impact to sensitive environmental receptors such as water supply wells. As a positive aspect with this site, much of this initial work has already been completed by EA, and that fact has been considered in this proposal. EA anticipates that the number of additional monitoring wells which may be required to further assess the incident will be minimal. We do anticipate that additional assessment will be required to characterize soil conditions at any locations of the site which have not been adequately assessed in order to identify potential other soil source areas of the contamination present in groundwater.

3) Preparation of a Remedial Action Plan Report

The remedial action plan report will present the findings and evaluate remedial alternatives. Remedial alternatives will be presented in a feasibility study, along with justification for the selected remedy. To date, the most practical remedial alternative may involve a monitored natural attenuation scenario subsequent to the assessment and remediation of any contaminated soil that may be encountered.

## PROJECTED COSTS

Following are EA's approximations of costs to bring the incident into compliance with the IHSB. The scope and cost of any additional assessment and/or remediation, if necessary, will be determined by completion of the recommendations presented herein. EA notes that these costs are provided based on EA's performance of the proposed scope of work.

### 1) Branch Notification, Preparation of REC Program Eligibility Checklist

| | |
|---|---|
| EA Services (State Notif., Public Notice, etc.): | **$ 2,200** |
| IHSB REC Application Fee: | **$ 2,500** |

### 2) Preparation and Implementation of Remedial Investigation Plan

| | |
|---|---|
| 2A. Plan Preparation: | **$ 5,500** |
| 2B. Plan Implementation | |
| 2B-1 – Source Identification - on-site soil assessment | **$12,000** |
| 2B-2 – Site Characterization (Updated groundwater sampling) | **$ 4,000** |
| 2B-3 – Site Characterization (Addit. Monitoring Wells) | **$14,000** |
| 2B-4 – NC Registered Surveyor | **$ 2,000** |
| 2B-5 – Reporting | **$ 7,000** |
| **Subtotal of 1 and 2:** | **$49,200** |

### 3) Implementation of Remedial Action Plan

The scope of work and costs for this phase are dependent on the findings of the previous phases. The scope of work and cost ranges can vary widely. Based on present data, the site scenario might involve limited (or no) soil excavation from the source area – then groundwater will be addressed using monitored natural attenuation (MNA) as the recommended remedial method.

EA appreciates the opportunity to be of service to you on this project. Please confirm authorization to proceed by returning (Fax - 704.846.3271) a signed copy of this page to EA. Please call the undersigned at (704) 846-8853 if you have any questions.

Sincerely,

**EnviroAssessments, PLLC**

Gary K. Sawyer, P.G.
Principal


Branch Banking and Trust Co.,
Executor and Trustee, R.D. Pate
By: Tarrila Watson 5/15/08
Signature Vice President Date

NCDENR
North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director | **Division of Waste Management** | Michael F. Easley, Governor
William G. Ross Jr., Secretary

May 7, 2008

Ms. Pamela Watson
BB&T
Personal Trust Specialist
Wealth Management Division
223 West Nash Street
Wilson, NC 27893-3801

STATE FILE

Re: Final REC Administrative Agreement
R. D. Pate Estate Site
Pikeville, Wilson County, NC
Site ID No. NONCD0002795

Dear Ms. Watson:

The Inactive Hazardous Sites Branch (Branch) is forwarding a final Administrative Agreement (AA) for a Registered Environmental Consultant (REC)-directed, voluntary assessment and remedial action for the R. D. Pate Estate Site (Site). The **original**, final AA will need to be signed and returned to me for execution by the Division of Waste Management (DWM). A copy of the AA will be returned for your records after it is executed. When the AA is signed, both the remediating party (RP) and REC will be acknowledging that the REC is fully accountable for complying with the REC Rules (15A NCAC 13C .0300) including the deadlines established upon execution of the AA and the standards of conduct for RECs in Section .0305(b).

Section III of the AA specifies the work to be performed. Be aware that for any site that enters the REC Program, the RP along with its designated RSM must make sure that all requirements for a particular phase of work specified in the REC Rules [see .0306(b)(5)] such as a remedial investigation work plan, remedial investigation report, remedial action plan, etc. have been completed and the document components required by the REC Rules have been addressed. Procedures for preparing these documents are described in the REC Program Implementation Guidance (Guidance) which can be found on our web site at http://www.wastenotnc.org/sfhome/RECGuidance.pdf. As indicated in Section III of the AA, for any requirement that has already been completed, the RP and REC can specify the location within the document(s) on file with the Superfund Section that indicates the requirement has already been met. Also be aware that all future work plans, report documents, and work phase completion statements that are submitted must be certified in accordance with .0306(b). If you believe unique circumstances exist regarding any of the required documents or the procedures described in the Guidance, please contact me.

By law the Department of Environment and Natural Resources must allow a 30-day public comment period for the proposed AA prior to its execution. The public notice has already been completed and one party contacted the Branch and requested to remain on the mailing list for any future required notices.

In order to participate in the REC Program, an annual administrative fee that is used by the state to offset the costs for auditing REC sites is required. The initial fee, which is due upon entering the REC Program, is $2,500.00 and must be received by the Branch before the AA can be executed. Note that there will be a similar fee each year until the remediation at the Site is complete. The annual fee is based on the number of sites in the REC Program each year and the state's projected costs for overseeing the REC Program.

If you have any questions, please contact me by phone at (919) 508-8451 or e-mail at Kim.Caulk@ncmail.net.

Sincerely,

Kim T. Caulk
REC Program
Inactive Hazardous Sites Branch
Superfund Section

Enclosure

cc: Mr. Gary Sawyer, EnviroAssessments (w/out enclosure)

# NOTICE OF ADMINISTRATIVE AGREEMENT STATE FILE

**R. D. Pate**
**Pikeville, Wayne County, North Carolina**

The North Carolina Division of Waste Management (Division) is soliciting public comment on an Administrative Agreement (Agreement) that the Division intends to enter into with R. D. Pate Estate/Trust (the Remediator). The Remediator plans to conduct a voluntary cleanup of hazardous substances at the Richard David Pate Site, 101 East Main Street, Pikeville, Wayne County, North Carolina. This voluntary remedial action will be conducted pursuant to N.C.G.S. 130A-310.9(b) and -310.9(c). Voluntary remedial actions implemented pursuant to N.C.G.S. 130A-310.9(c) are directed by Department-designated "Registered Environmental Consultants" in place of state oversight. A copy of the Agreement can be viewed at the following location:

NC Division of Waste Management
401 Oberlin Rd. - Suite 150
Raleigh, North Carolina 27605

Hours (by appointment only):
Monday - Friday 8:00 am - 5:00 pm
To schedule an appointment, contact Mr. Scott Ross
at (919) 508-8475

Comments or questions on the draft Agreement or the role of the Registered Environmental Consultant for this site should be directed to:

MR. KIM T. CAULK
REC PROGRAM
SUPERFUND SECTION
NORTH CAROLINA DIVISION OF WASTE MANAGEMENT
401 OBERLIN ROAD, SUITE 150
RALEIGH, NC 27605
(919) 508-8400

All comments on the draft Agreement must be received no later than **April 22, 2008.**

**R. D. Pate**
**Pikeville, Wayne County, North Carolina**

STATE FILE

Mailing List:

~~Mr. Kim T. Caulk~~
~~NC DENR -~~
~~Division of Waste Management~~
~~Superfund Section~~
~~REC Program~~
~~401 Oberlin Road, Suite 150~~
~~Raleigh, NC 27605~~

Mr. Lee Smith, County Manager
Wayne County
224 E. Walnut Street
Goldsboro, NC 275633

Mr. James Roosen
Wayne County Health Department
301 North Herman Street
Box CC
Goldsboro, NC 27530

Ms. Pamela Watson
BB&T
Vice President, Personal Trust Specialist
Wealth Management Division
223 West Nash Street
Wilson, NC 27893-3801

Mr. Gary Sawyer
EnviroAssessments
9307 Monroe Road, Suite K
Charlotte, NC 28270

Richard D. Pate
P.O. Box 54
Pikeville, NC 27863

Robin R. Sutherland
P.O. Box 10547
Goldsboro, NC 27532

4/10/08
Per Cherlyn Bradley, please keep on public mailing list. KLL

J. Hardy Tile Inc.
139 Graceland Drive
Pikeville, NC 27863

Charlie B. Howell
P.O. Box 37
Pikeville, NC 27863

William J. Evans
366 Forehand Road
Pikeville, NC 27863

**NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES**
**DIVISION OF WASTE MANAGEMENT**
**SUPERFUND SECTION**

STATE FILE

**IN RE:** **R. D. PATE**
**NCD _____**
**PIKEVILLE, NORTH CAROLINA**
**WAYNE COUNTY**

**ADMINISTRATIVE AGREEMENT FOR REGISTERED ENVIRONMENTAL CONSULTANT-DIRECTED ASSESSMENT AND REMEDIAL ACTION PURSUANT TO N.C.G.S. 130A-310.9(c) and 15A NCAC 13C .0300.**

**DOCKET NUMBER ____-SF-____**

## I. STATEMENT OF PURPOSE

The purpose of this Administrative Agreement (Agreement) is to provide for implementation by R. D. Pate Estate/Trust (the Remediator) of a voluntary remedial action program pursuant to N.C.G.S. 130A-310.9(c) and 15A NCAC 13C .0300 at the site defined in Section II. A. of this Agreement.

## II. STIPULATIONS OF FACT

A. The "Site" is the property currently owned by Richard David Pate at 101 East Main Street, Pikeville, Wayne County, North Carolina and any additional area which has become contaminated as a result of hazardous substances or waste disposed or discharged at that property.

B. The Site is an inactive hazardous substance or waste disposal site within the meaning of N.C.G.S. 130A-310(3).

## III. WORK TO BE PERFORMED

A. The Remediator shall conduct a voluntary remedial action at the Site in accordance with the provisions of N.C.G.S. 130A-310.9(c), 15A NCAC 13C .0300, and the "Registered Environmental Consultant Program Implementation Guidance" of the North Carolina Division of Waste Management (the Division). The voluntary remedial action shall include the remediation of any hazardous substances as defined in G.S. 130A-310(2) and any contaminants as defined in 15A NCAC 2L present at the Site.

B. Within thirty-six (36) months after the execution of this Agreement, the Remediator shall complete a remedial investigation at the Site which complies with the provisions of 15A NCAC 13C .0300 including, but not limited to, .0302(f), .0302(k)-(p), .0306(c)-(h) and .0306(q). For any requirement that has already been met, the Remediator shall specify the location within the document(s) on file with the Superfund Section that show(s) that the requirement has been met. The remedial investigation shall not be considered complete until the Remediator has submitted a remedial investigation report and completion statement, both certified in accordance with .0306(b) by the REC and the Remediator.

C. Within twenty-four (24) months of completion of the remedial investigation or within sixty (60) months after the execution of this Agreement, whichever is earlier, the Remediator shall begin operation of the remedial action system for groundwater at the Site in compliance with the provisions of 15A NCAC 13C .0300 including, but not limited to, .0302(f), .0302(k) - (p), .0306(c) - (d) and .0306(i) - (n). For any requirement that has already been met, the Remediator shall specify the location within the document(s) on file with the Superfund Section that show(s) that the requirement has been met. Operation of the remedial action system for groundwater shall be considered to have begun only upon the submission to the Division of the groundwater remedial action construction completion report, certified in accordance with .0306(b) by the REC and the Remediator, and upon commencement of the actual operation of the remedial system.

D. Within ninety-six (96) months after the execution of this Agreement, the Remediator shall complete, for wastes, soils, surface water and sediments at the Site, a remedial action which complies with the provisions of 15A NCAC 13C .0300 including, but not limited to, .0302(f), .0302(k) - (p), .0306(c) - (d), .0306(i) - (n) and .0308. For any requirement that has already been met, the Remediator shall specify the location within the document(s) on file with the Superfund Section that show(s) that the requirement has been met. The remedial action for wastes, soils, surface water and sediments shall not be considered complete until the Remediator has submitted, for these media, a remedial action completion report and work phase completion statement, both certified in accordance with .0306(b) by the REC and the Remediator.

E. The Remediator shall submit quarterly letter status reports on or before the 15$^{th}$ day of January, April, July and October of each year until such time as the REC has prepared and submitted certified completion statements for all contaminated media pursuant to 15A NCAC 13C .0306(b)(5)(D). Each quarterly status report must summarize, in one to two paragraphs, work performed since the last quarterly status report. These status reports must include a statement confirming work is progressing in a manner to achieve the mandatory work phase completion deadlines set out in 15A NCAC 13C .0302(h). These status reports must be certified in accordance with .0306(b) by the REC assigned to this project and the Remediator. A quarterly letter status report may be incorporated with another document such as a remedial

investigation work plan, a remedial investigation report, a remedial action plan, etc. if such other document is submitted at the time when a quarterly letter status report is due. Once the REC has prepared and submitted certified completion statements for all contaminated media pursuant to 15A NCAC 13C .0306(b)(5)(D), quarterly letter status reports under this paragraph shall be supplanted with the requirements of progress reporting of remedial action implementation pursuant to 15A NCAC 13C .0306(o).

F. If there is groundwater contamination at the Site, the Remediator shall install and monitor sentinel groundwater monitoring wells such that groundwater monitoring data obtained from the monitoring activities will accurately monitor the migration of any contamination at the Site toward any drinking water or production water well that is known to be present within a one-thousand (1000) feet of the detectible perimeter of the groundwater contamination at the Site. The Remediator shall notify the Division within twenty-four (24) hours of the time when the Remediator or the Remediator's REC discovers that a sentinel groundwater monitoring well has detectable concentrations of any contamination.

G. After completing the inventory of all identifiable wells used as sources of potable water pursuant to 15A NCAC 13C .0306(g)(6), if any new drinking water wells are installed within one-thousand five-hundred (1500) feet of the Site property boundaries, the Remediator and/or the Remediator's REC shall notify the Division within twenty-four (24) hours of the time when the Remediator and/or the Remediator's REC discovers or otherwise finds out about such wells during the normal course of work for the project.

H. If hazardous substances as defined in G.S. 130A-310(2) or other contaminants as defined in 15A NCAC 2L present at the Site have affected any drinking water wells, the Remediator shall, within a time period established by the Division, provide an alternate drinking water source for users of those wells.

I. The Remediator shall ensure that remedial action progress reports are prepared in accordance with 15A NCAC 13C .0306(o).

## IV. ADDITIONAL PROVISIONS

A. All work performed pursuant to this Agreement shall be under the direction and supervision of the Division-approved REC specified in Attachment A, in accordance with 15A NCAC 13C .0302(f).

B. All work plans, reports, completion statements and project schedules prepared pursuant to this Agreement shall be certified by a representative of the Remediator in accordance with 15A NCAC 13C .0306(a) and .0306(b)(2).

C. In the event that the REC specified in Attachment A ceases to serve in that capacity at the Site or is disqualified as an REC by the Division, the Remediator's voluntary

remedial action status shall be subject to revocation if the Remediator fails to propose a replacement REC within sixty (60) days, in accordance with 15A NCAC 13C .0302(n).

D. The Remediator shall pay an annual administration fee to the Division, in accordance with 15A NCAC 13C .0307(c), to help offset the costs of the Division's audits of voluntary remedial actions.

E. The Remediator is responsible for obtaining all necessary registrations, permits and approvals in accordance with 15A NCAC 13C .0306(m)(3).

F. The Remediator and its REC shall preserve, for at least six (6) years after termination of this Agreement, all records and documents in its possession or in the possession of its divisions, employees, agents, accountants, contractors or attorneys which relate in any way to this Agreement. After this six (6)-year period, the Remediator shall notify the Division at least thirty (30) days prior to the destruction of any such records and documents. The Remediator shall comply with any written request by the Division, prior to the day for which destruction is scheduled, to continue to preserve such records and documents or to provide them to the Division. The Remediator may assert any available right to confidentiality regarding particular records and documents, other than analytical data. Pursuant to 15A NCAC 13C .0302(m) the REC must maintain all such records and documents beyond the six (6) year period unless it receives Division approval for destruction.

G. In the event that the Agreement is terminated, the Remediator and/or REC shall, within thirty (30) days, submit to the Division a summary report that includes all information and data that has been collected pursuant to 15A NCAC 13C .0306(h), (n), (o), or (p). Certification of the report shall be provided in accordance with 15A NCAC 13 C .0306(b)(1) and (2).

The effective date of this Agreement shall be the date on which it is executed by Jack R. Butler.

Date Executed: _____

By: _____
Jack R. Butler, P.E.
Chief, Superfund Section
Division of Waste Management
North Carolina Department of Environment
and Natural Resources

By: _____
(Signature of Party Authorized to Bind Remediator)

_____
(Typed or Printed Name of Signatory, Title)

_____
(Typed or Printed Name of Company)

**North Carolina Department of Environment and Natural Resources**
**Division of Waste Management**
**Superfund Section**

**Attachment A to Administrative Agreement for Registered Environmental Consultant-Directed Assessment and Remedial Action Pursuant to N.C.G.S. 130A-310.9(c) and 15A NCAC 13C .0300.**

**Docket No. ____-SF-____**

We hereby certify that the Remediator has retained the undersigned Division-approved Registered Environmental Consultant (REC) to implement and oversee a voluntary remedial action at the Site pursuant to N.C.G.S. 130A-310.9(c) and 15A NCAC 13C .0300, and that the undersigned Division-approved Registered Site Manager (RSM) shall serve as RSM for the voluntary remedial action.

The undersigned Remediator and REC agree to indemnify and save and hold harmless the State of North Carolina and its agencies, departments, officials, agents, employees, contractors and representatives, from any and all claims or causes of action arising from or on account of acts or omissions of the Remediator or REC or their officers, employees, receivers, trustees, agents or assigns in carrying out actions required pursuant to the Agreement which incorporates this Attachment A (this Agreement). Neither the State of North Carolina nor any agency or representative thereof shall be held to be a party to any contract involving the Remediator relating to the Site excluding, however, this Agreement.

The Remediator affirms that the REC has been provided a full and complete copy of this Agreement prior to signature. The undersigned REC representatives affirm that they have received, read, and intend to comply with the provisions of this Agreement. Both the Remediator and REC acknowledge that the REC is fully accountable for complying with 15A NCAC 13C .0300 including the deadlines established upon execution of this Agreement.

**Remediator:**

_____
(Signature Party Authorized to Bind Remediator) (Date)

_____
(Typed or Printed Name of Signatory, Title)

_____
(Typed or Printed Name of Company)

**Registered Environmental Consultant:**

_____
(Signature of REC Owner, Partner, or Corporate Officer) (Date)

_____
(Typed or Printed Name of Signatory, Title)

_____
(Typed or Printed Name of REC Firm)

**Registered Site Manager:**

_____
(RSM Signature) (Date)

_____
(Typed or Printed Name of RSM)

**Subject:** Draft Administrative Agreement for R. D. Pate (Pikeville, Wayne Co. NC - Incident No. 7568)
**From:** "Jeremy Odom" <jodom@enviroassessments.com>
**Date:** Mon, 3 Mar 2008 10:38:07 -0500
**To:** <kim.caulk@ncmail.net>
**CC:** "Gary Sawyer" <gsawyer@enviroassessments.com>

STATE FILE

Kim,

As we discussed on Friday, please use the information below for the R. D. Pate Draft Administrative Agreement (Incident No. 7568). I have also attached a site map depicting adjacent owners, and a corresponding table of adjacent owner information for your public notices.

**Site Name**: Former Pate Service Station and Garage (R. D. Pate Estate)
101 East Main Street
Pikeville, Wayne County, North Carolina
**Incident Number: 7568**

**Exact Name of Remediator:**

R. D. Pate Estate / Trust
Post Office Box 2907
223 West Nash Street
Wilson, NC 27894-2907

**Highest ranking official of Remediating Party (contact info):**

Pamela Watson
BB&T
Vice President
Personal Trust Specialist
Wealth Management Division
223 West Nash Street
Wilson, NC 27893-3801
(252) 246-4027
pwatson@bbandt.com

**Other contacts:**

Gary K. Sawyer
Principal / Licensed Geologist
9307 Monroe Road, Suite K
Charlotte, North Carolina 28270
704.846.8853
gsawyer@enviroassessments.com

Jeremy Odom
Project Manager
(address same as above)
980.722.0908
jodom@enviroassessments.com

**Current Property owner of the site:**
Richard David Pate

P. O. Box 54
Pikeville, NC 27863
(252) 246-4027

Thanks again for your assistance on this project. Please let us know if you have any questions or require any additional information.

Jeremy

**Jeremy Odom**
**Senior Project Manager**
**EnviroAssessments, PLLC**
**9307 Monroe Road, Suite K**
**Charlotte, North Carolina 28270**
**ph: 704.846.8853 Ext. 238**
**fax: 704.846.3271**
**cell: 980.722.0908**

| | | |
|---|---|---|
| **07-7019.3 Table 1 Adjacents and Wells.xls** | **Content-Description:** | 07-7019.3 Table 1 Adjacents and Wells.xls |
| | **Content-Type:** | application/vnd.ms-excel |
| | **Content-Encoding:** | base64 |

| | | |
|---|---|---|
| **Figure 3 Well Locations.DOC** | **Content-Description:** | Figure 3 Well Locations.DOC |
| | **Content-Type:** | application/msword |
| | **Content-Encoding:** | base64 |

# TABLE 1

## ADJACENT PROPERTY OWNER/OCCUPANT AND WATER SUPPLY WELL SURVEY INFORMATION
## R.D. PATE ESTATE
## INCIDENT NUMBER: 7568
## PIKEVILLE, WAYNE COUNTY, NORTH CAROLINA
## ENVIROASSESSMENTS, PLLC PROJECT NO. 07-7019.3

| Property Address | Owner Name and Address | Parcel ID (See Fig 3) | Distance from Source Area | No. of Wells on Property | Well Depth (ft BGS) | Well Casing Depth (ft BGS) | Type of Well | Well Information/Status | Well Use |
|---|---|---|---|---|---|---|---|---|---|
| 101 East Main Street (Subject Property) | Richard D. Pate<br>P.O. Box 54<br>Pikeville, NC 27863 | 3603276476 | SITE<br>1 | 0 | NA | NA | NA | NA | NA |
| 100 East Railroad Street | Robin R. Sutherland<br>P.O. Box 10547<br>Goldsboro, NC 27532 | 3603276582 | Adjacent North<br>2 | 0 | NA | NA | NA | NA | NA |
| 103 Main Street | J. Hardy Tile Inc.<br>139 Graceland Drive<br>Pikeville, NC 27863 | 3603277551 | Adjacent East<br>3 | 1 | Unknown | Unknown | Water Supply | Abandoned Dec. 2007 | Not In Use |
| 101 Southeast Railroad Street | Richard D. Pate<br>P.O. Box 54<br>Pikeville, NC 27863 | 3603277363 | Adjacent Southeast<br>4 | 0 | NA | NA | NA | NA | NA |
| 101 Southeast Railroad Street | Richard D. Pate<br>P.O. Box 54<br>Pikeville, NC 27863 | 3603276374 | Adjacent Southwest<br>5 | 0 | NA | NA | NA | NA | NA |
| North Railroad Street | Charlie B. & Lucinda H. Howell<br>P.O. Box 37<br>Pikeville, NC 27863 | 3603274421 | Adjacent Southwest<br>6 | 0 | NA | NA | NA | NA | NA |
| North Railroad Street | Charlie B. Howell et al<br>P.O. Box 37<br>Pikeville, NC 27863 | 3603274426 | Adjacent West<br>7 | 0 | NA | NA | NA | NA | NA |
| North Railroad Street | Charlie B. Howell et al<br>P.O. Box 37<br>Pikeville, NC 27863 | 3603274434 | Adjacent West<br>8 | 0 | NA | NA | NA | NA | NA |
| Railroad Street | William J. & Carol S. Evans<br>366 Forehand Road<br>Pikeville, NC 27863 | 3603274428 | Adjacent Northwest<br>9 | 0 | NA | NA | NA | NA | NA |

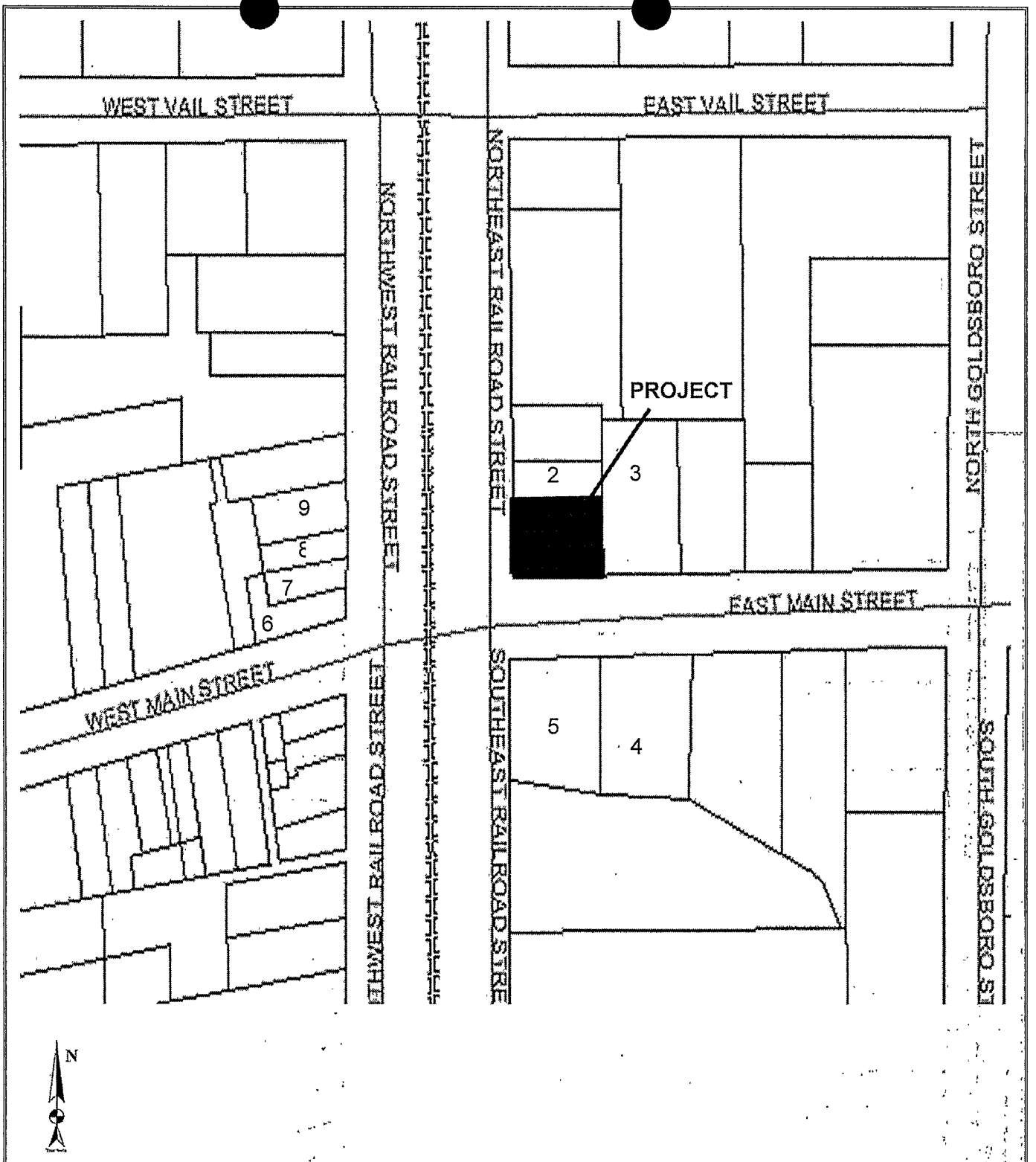



**Figure #3 – Surrounding Owners and Well Locations**

SCALE: UNKNOWN
SOURCE: WAYNE COUNTY GIS

EnviroAssessments, PLLC
9307 Monroe Road, Ste. K
Charlotte, NC 28270
Office: (704) 846-8853
Fax: (704) 846-3271

SITE NAME: R. D. PATE ESTATE
101 EAST MAIN STREET
PIKEVILLE, NORTH CAROLINA

PROJ. NO: 07-7019.3

North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director | **Division of Waste Management** | Michael F. Easley, Governor
William G. Ross Jr., Secretary

January 15, 2008

STATE FILE

Mr. Richard David Pate
P.O. Box 54
Pikeville, North Carolina 27863

Re: Requirements for Contaminant Assessment and Cleanup

Former Pates Service Station and Garage (Facility ID #0-002653)
Pikeville (Wayne County) NC

Dear Mr. Pate:

It is our understanding that you have recently or previously been performing contaminant assessment and/or cleanup activities at the site identified above as directed by the Division of Waste Managements' Underground Storage Tank Section (UST). As part of an organizational change within the Department of Environment and Natural Resources, regulatory jurisdiction for oversight of this site has been transferred to the Superfund Section's Inactive Hazardous Sites Branch (Branch) within the Division of Waste Management. The oversight of the assessment and cleanup of all historical non-permitted releases of non-petroleum contaminants has been consolidated into one agency and now resides with the Division of Waste Management's Superfund Section. Additional information regarding the reorganization, along with information on the Branch's voluntary cleanup program, may be found on the Branch's web site at http://wastenotnc.org/sfhome/ihsbrnch.htm.

Note that often people are confused by the name of the Inactive Hazardous Sites Response Act and the Branch. "Inactive Hazardous Sites" by definition are any areas where hazardous substances have come to be located and would include active and inactive facilities and a variety of property types. The term "inactive" refers to the fact that cleanup was inactive at large numbers of sites at the time of program enactment.

**Actions Required At This Time**

The enclosed questionnaire must be completed and returned by February 14, 2008 to continue to receive state approval for work completed. However, if the site has contaminated potable wells in the area, if potable wells are located within 1000 feet of the property boundary, or if other higher risk conditions exist, you should respond and provide the questionnaire immediately, but no later than the above specified date.

**Future Assessment and Cleanup Activities**

All correspondence regarding cleanup of non-petroleum contaminant releases at non-permitted sites should no longer be sent to the UST Section and should be forwarded to the Branch instead.

Sites with groundwater contamination have been subject to multiple cleanup authorities. Such sites are subject to the requirements contained in 15A NCAC 2L, Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina, as well as the requirements of the Inactive Hazardous Sites Response Act (IHSRA). Groundwater cleanup levels are the same under 15A NCAC 2L and the IHSRA. The IHSRA, however, has requirements for other contaminated media as well. Implementing a groundwater corrective action plan under APS supervision has never relieved a party from obligations to address other contaminated media under the IHSRA. As with the federal Superfund/CERCLA program, IHSRA was established to address all media contaminated with hazardous substances. Cleanup under the IHSRA is recognized by the US EPA as consistent with the requirements of CERCLA, thereby removing concerns for cleanup actions being required by the US EPA.

For consistency, and to address all contaminated media at the site with one approval process, all site assessment and cleanup at sites with hazardous substance releases will proceed through IHSRA authority. Consolidating all the contaminant remediation authorities serves to make cleanup approval comprehensive (so you do not have to work with multiple agencies in resolving the various contaminated media at your site).

The Branch is working to make the transition of site cleanups under 15A NCAC 2L authority to IHSRA authority as smooth as possible. We have compared the APS's last published soil to groundwater cleanup levels to IHSRA direct contact soil levels for unrestricted use. In general, if the contaminant cleanup action was in compliance with North Carolina groundwater standards and the APS's last published soil to groundwater cleanup levels, your cleanup action should have met Branch soil cleanup levels (for both protection of groundwater and direct contact for unrestricted use) under the IHSRA for the contaminants and areas investigated. If there are areas of concern, contaminated media, or suspect contaminants that were not investigated in the previous work, those items would need to be addressed.

Sites with volunteers willing to continue with assessment or cleanup will be addressed as follows:

Hazardous Substance Cleanup (and mixed hazardous substance and pollutants):
The Branch has a privatized oversight arm of the voluntary cleanup program known as the Registered Environmental Consultant (REC) program. Based on the responses provided on the questionnaire (degree of hazard and public interest in the site), the Branch will determine whether a staff person or an REC will perform the oversight and approval of your assessment and cleanup action. Having one or more of the conditions identified on the questionnaire does not necessarily preclude the site for qualifying for an REC-directed cleanup action.

Under the REC program, the volunteer would hire an environmental consulting firm that has been approved by the state as meeting certain qualifications to implement a cleanup and certify that the work is being performed in compliance with regulations. In other words, the REC's certifications of compliance are in place of direct oversight by the Branch. Details of the REC program can be found at http://www.wastenotnc.org/sfhome/recprog.htm.

Cleanup At Sites With Non-Hazardous Substance Contamination Only:
If your site contamination is non-hazardous substance pollutants only, the Branch will work with you under 15A NCAC 2L authority rather than Inactive Hazardous Sites Act authority to address the site. Branch staff will directly oversee the work.

**Failure to Respond**

If we do not receive a completed questionnaire, the Branch will take further action to prioritize the site. At the time the site becomes a priority, if the responsible parties do not enter the Branch's voluntary cleanup program, the Branch may issue an order compelling assessment or cleanup or take other enforcement action. In addition, if you choose not to conduct a state-approved cleanup at this time, the site may be referred to the USEPA to be screened for action under the federal Superfund Program.

If you have any questions specific to the REC Program, please contact the REC Program Manager, Kim Caulk, at (919) 508-8451. For all other questions please contact me at 910-433-3354.

Sincerely,

David L. Brown, L.G.
Inactive Hazardous Sites Branch
Superfund Section

Fayetteville Regional Office
225 Green Street, Suite 714
Fayetteville NC 28301

cc. Mr. Gary K. Sawyer
EnviroAssessments, PLLC
9307 Monroe Road, Suite K
Charlotte, NC 28270

Enclosure

# EnviroAssessments

Property Transaction Assessments
Environmental / Geological Investigations
Asbestos / Mold / Wetlands Surveys

9307 Monroe Road, Suite K
Charlotte, NC 28270
Office: (704) 846-8853
Fax: (704) 846-3271


January 4, 2008



NCDENR
Division of Waste Management
Inactive Hazardous Sites Branch
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605

Attention: Mr. Kim Caulk
REC Program Manager

STATE FILE

Reference: Final REC Administrative Agreement
**R. D. Pate Estate**
101 East Main Street
Pikeville, Wayne County, North Carolina
EA Project No. 07-7019.3

Dear Mr. Caulk:

On behalf of Ms. Pamela Watson, EnviroAssessments, PLLC (EA) is providing this REC Administrative Agreement for the referenced site. I have also enclosed the $2,500 REC Entry Fee.

We appreciate your assistance on this project. Please contact me or Jeremy Odom at (704) 846-8853 if you have any questions.

Sincerely,

**EnviroAssessments, PLLC**

Gary K. Sawyer, P.G.
Principal

EnviroAssessments

Property Transaction Assessments
Environmental / Geological Investigations
Asbestos / Mold / Wetlands Surveys

9307 Monroe Road, Suite K
Charlotte, NC 28270
Office: (704) 846-8853
Fax: (704) 846-3271

January 4, 2008



STATE FILE

NCDENR
Division of Waste Management
Inactive Hazardous Sites Branch
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605



Attention: Mr. David Brown

Reference: Notification of Release
**R. D. Pate Estate**
101 East Main Street
Pikeville, Wayne County, North Carolina
EA Project No. 07-7019.3

Dear Mr. Brown:

On behalf of Ms. Pamela Watson, EnviroAssessments, PLLC (EA) is providing this notification of our recent discovery of chlorinated solvents in groundwater at the referenced site (the "Project") during a Phase II Limited Site Assessment (LSA-II) conducted in September, 2007. A copy of the Site Cleanup Questionnaire is **attached**.

In summary, the groundwater samples from each of the monitoring wells revealed levels of target analytes which exceed the state's minimal reporting action limit, the NCAC 2L Groundwater Standards. The compounds included common petroleum and solvent-related contaminants.

MW-1 revealed concentrations of 2 chlorinated solvent target analytes, Trichloroethene (TCE) and 1,1,2,2-Tetrachloroethane, which exceed their respective NCAC 2L Groundwater Standards. MW-2 revealed concentrations of TCE and 1,1,2,2-Tetrachloroethane (chlorinated solvent analytes) and Diisopropyl Ether and Benzene (petroleum-related analytes); all of which exceed their respective NCAC 2L Groundwater Standards. MW-3 revealed concentrations of the petroleum-related analytes Diisopropyl Ether; Benzene; and Naphthalene; all of which exceed their respective NCAC 2L Groundwater Standards. MW-4 revealed concentrations of the petroleum-related analytes Total Xylenes and Naphthalene, both of which exceed their respective NCAC 2L Groundwater Standards. Several other target analytes were revealed at detectable concentrations, none of which exceeded

their NCAC 2L Standards. None of the detected analytes exceed their respective Gross Contamination Levels (GCLs).

The extent of Benzene and TCE in groundwater are depicted on their respective Groundwater Isoconcentration Maps attached as **Figures 6 and 7.** The source of the petroleum-related compounds (Benzene, Xylenes and Naphthalene) appears to be the western side of the former UST basin. The source of the chlorinated solvent-related compounds (TCE and 1,1,2,2-Tetrachlroethane) appears to be the area of the site located between the garage doors and the former UST basin. All of the compounds appear to be migrating off-site toward the west and across North East Railroad Street. The lateral extents of the petroleum and chlorinated solvent contamination plumes in groundwater have not been defined in the down-gradient direction and the extent of impact to off-site properties has not been determined.

The constituents that were detected in groundwater above the NCAC 2L Standards are characteristic of petroleum and solvent compounds and appear to be a result of a combination of releases (leaks and spills) from the former UST systems and from the on-site automotive and equipment repair operations areas.

The LSA receptor survey performed by EA personnel identified one (1) drinking water supply well within 1,500 feet of the Project. The vacant lot adjacent to the east of the Project, located at 103 East Main Street, maintained the water supply well. This well was located approximately 100 feet east of the source area of release. At NCDENR's request, the well has been properly abandoned and a *Notice of Residual Petroleum* has been prepared to address the remaining petroleum contamination in soil and groundwater.

The Project and the remainder of surrounding properties in the Project area have access to the municipal water supply. The nearest surface water feature is an intermittent drainage feature in the headwater of The Slough, located approximately 1,500 feet south of the Project. The site location and other risk factors appear to classify the site as commercial and the surrounding area as residential/commercial. No additional water supply wells are located within 1,000 feet of the source area.

**Petroleum Incident**

The petroleum incident is being addressed by the UST Section (Ms. Rose Ballance of the Washington Regional Office). EA supervised the abandonment of the water supply well described above which was located approximately 100 feet to the east of the Project on the adjacent property owned by Phil Hardy. This activity should serve to allow re-classification of the incident as "low risk" and allow closure of the petroleum-related incident pending filing of a deed restriction to

address the remaining petroleum contamination in on-site soil and groundwater.

**Chlorinated Solvent Incident**

Regarding the chlorinated solvent compounds in groundwater, EA is notifying the Inactive Hazardous Sites Branch (IHSB) in order that a determination is made as to any additional requirements for assessment or remediation. A Site Cleanup Questionnaire is **attached.** On behalf of Ms. Pamela Watson, we request that the IHSB respond to this notification and provide an opinion as to whether the authorities concur with our findings and conclusions.

We appreciate your assistance on this matter. Please contact me or Jeremy Odom at (704) 846-8853 if you have any questions.

Sincerely,

**EnviroAssessments, PLLC**

Gary K. Sawyer, P.G.
Principal

Attachments

# Site Cleanup Questionnaire

Remediating parties interested in volunteering should prepare this form with the assistance of an environmental consultant. All cooperative parties are eligible for Branch-approved remedial actions. Answer all questions, based on current information, and provide writtendescriptions where needed.

NCDENR Site Name, City and County **R. D. Pate Estate, Pikeville, Wayne County**

1. Is the site located on or immediately adjacent to residential property, schools, day-care centers or other sensitive populations? ☒ Y ☐ N

   If yes, please explain on a separate page.

2. What is the distance (from site property line) to the nearest residence, school or day-care center? Please attach a map showing the site and nearest residence, school or daycare center. 100 feet

3. Is the site completely surrounded by a locked fence? ☐ Y ☒ N
   If no, please explain security measures at the site on a separate page.

4. Are site surface soils known to be contaminated? ☒ Y ☐ N

   If yes, or unknown, describe briefly on a separate page.

5. Is site groundwater known to be contaminated? ☒ Y ☐ N

   If yes, or unknown, describe briefly on a separate page.

6. Is site sediment or surface water known to be contaminated? ☐ Y ☒ N

   If yes, or unknown, describe briefly on a separate page.

7. Has groundwater contamination affected any drinking water wells? ☐ Y ☒ N

   If yes, or unknown, please explain on a separate page.

8. What is the distance to the nearest downgradient drinking water well? Not Applicable

9. What is the distance to the nearest downstream surface water intake? > 1,500 feet

10. Are hazardous vapors, air emissions or contaminated dust migrating into occupied residential, commercial or industrial areas? ☐ Y ☒ N

    If yes, or unknown, please explain on a separate page.

11. Have hazardous substances known to have migrated off property at concentrations in excess of Branch unrestricted-use remediation goals? ☐ Y ☒ N

    If yes, or unknown, please explain on a separate page.

12. Has the local community expressed concerns about contamination at the site? ☐ Y ☒ N

    If yes, or unknown, please explain on a separate page.

13. Based on current information, are there any sensitive environments located on the property (sensitive environments are identified in the Remedial Investigation Work Plans section of the IHSB " Guidelines forAssessment and Cleanup "at www.wastenotnc.org/sfhome/ stateleadguidance.pdf )? ☐ Y ☒ N

    If yes, or unknown, please explain on a separate page.

14. Based on current information, has contamination from the site migrated into any sensitive environments? ☐ Y ☒ N

If yes, or unknown, please explain on a separate page.

15. Do site contaminants include radioactive or mixed radioactive and chemical wastes? ☐ Y ☒ N

If yes, or unknown, please explain on a separate page.

## Remediating Party Certification Statement

I hereby certify that the responses provided above are, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information.

Branch Banking and Trust Co., Executor R.D. Pate Estate and Trustee VA with R.D. Pate

By: Pamela Watson, Vice President — January 22, 2008

(Signature of Remediating Party Representative) (Date)

Pamela Watson, Vice President

(Printed Name and Title of Remediating Party Representative)

N/A

(Printed Name of Company)

North Carolina

(State in which signature is witnessed)

Wilson County

I, Barbara E. Bristow, a Notary Public of said County and State, do hereby certify that Pamela Watson did personally appear and sign before me this the 22 day of January, 2008.

Barbara E. Bristow

Notary Public (signature)

(OFFICIAL SEAL)

My commission expires: 2/21/2012

## Environmental Consultant Certification Statement

I hereby certify that the responses provided above are, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information.

(Signature) 1-15-2008 (Date)

Gary Sawyer, P. G. GARY K. SAWYER
(Printed Name)

Gary Sawyer, P. G.
(Printed Name of Environmental Consultant)

N. C.
(State in which signature is witnessed)

Union County

I, Kathy L. Bass, a Notary Public of said County and State, do hereby certify that Gary Sawyer, P. G. did personally appear and sign before me this the 15 day of Dec., 2008.

Kathy L. Bass
Notary Public (signature)

(OFFICIAL SEAL)

My commission expires: Sept. 16, 2009

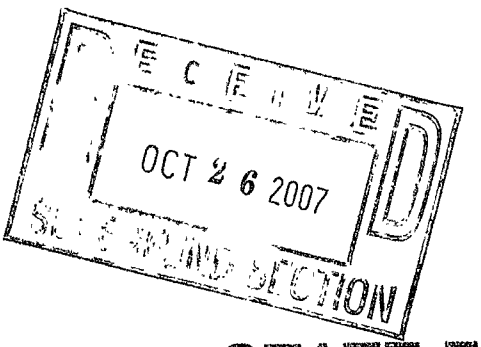
EnviroAssessments

Property Transaction Assessments
Environmental / Geological Investigations
Asbestos / Mold / Wetlands Surveys

9307 Monroe Road, Suite K
Charlotte, NC 28270
Office: (704) 846-8853
Fax: (704) 846-3271

October 24, 2007

NCDENR
Division of Waste Management
Inactive Hazardous Sites Branch
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605




STATE FILE

Attention: Mr. John Walch
Eastern Regional Supervisor

Reference: Notification of Release
**R. D. Pate Estate**
101 East Main Street
Pikeville, Wayne County, North Carolina
EA Project No. 07-7019.3

Dear Mr. Walch:

On behalf of Branch Banking and Trust Company (BB&T), EnviroAssessments, PLLC (EA) is providing this notification of our recent discovery of chlorinated solvents in groundwater at the referenced site (the "Project") during a Phase II Limited Site Assessment (LSA-II) conducted in September, 2007. A copy of the LSA-II Report is **attached.**

In summary, The groundwater samples from each of the monitoring wells revealed levels of target analytes which exceed the state's minimal reporting action limit, the NCAC 2L Groundwater Standards. The compounds included common petroleum and solvent-related contaminants.

MW-1 revealed concentrations of 2 chlorinated solvent target analytes, Trichloroethene (TCE) and 1,1,2,2-Tetrachloroethane, which exceed their respective NCAC 2L Groundwater Standards. MW-2 revealed concentrations of TCE and 1,1,2,2-Tetrachloroethane (chlorinated solvent analytes) and Diisopropyl Ether and Benzene (petroleum-related analytes); all of which exceed their respective NCAC 2L Groundwater Standards. MW-3 revealed concentrations of the petroleum-related analytes Diisopropyl Ether; Benzene; and Naphthalene; all of which exceed their respective NCAC 2L Groundwater Standards. MW-4 revealed concentrations of the petroleum-related analytes Total Xylenes and Naphthalene, both of which exceed their respective NCAC 2L Groundwater Standards. Several other target analytes were revealed at detectable concentrations, none of which exceeded their NCAC 2L Standards. None of the detected analytes exceed their respective Gross Contamination Levels (GCLs).

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The constituents that were detected in groundwater above the NCAC 2L Standards are characteristic of petroleum and solvent compounds and appear to be a result of a combination of releases (leaks and spills) from the former UST systems and from the on-site automotive and equipment repair operations areas.

The LSA receptor survey performed by EA personnel identified one (1) drinking water supply well within 1,500 feet of the Project. The vacant lot adjacent to the east of the Project, located at 103 East Main Street, maintains the active water supply well. This well is located approximately 100 feet east of the source area of release. The well remains open but has not been in use for approximately 35-40 years. The Project and the remainder of surrounding properties in the Project area have access to the municipal water supply. The nearest surface water feature is an intermittent drainage feature in the headwater of The Slough, located approximately 1,500 feet south of the Project. The site location and other risk factors appear to classify the site as commercial and the surrounding area as residential/commercial. One water supply well is located within 1,000 feet of the source area. The release should be classified as a "high risk" incident under the state's Risk-based Corrective Action guidelines.

**Petroleum Incident**

The petroleum incident is being addressed by the UST Section (Ms. Rose Ballance of the Washington Regional Office). EA will supervise the abandonment of the water supply well described above which is located approximately 100 feet to the east of the Project on the adjacent property owned by Phil Hardy. This activity should serve to allow re-classification of the incident as "low risk" and allow closure of the petroleum-related incident pending filing of a deed restriction to address the remaining petroleum contamination in on-site soil and groundwater.

**Chlorinated Solvent Incident**

Regarding the chlorinated solvent compounds in groundwater, EA is notifying the Inactive Hazardous Sites Branch (IHSB) in order that a determination is made as to any additional

requirements for assessment or remediation. On behalf of BB&T, we request that the IHSB respond to this notification and provide an opinion as to whether the authorities concur with our findings and conclusions.

We appreciate your assistance on this matter. Please contact me or Jeremy Odom at (704) 846-8853 if you have any questions.

Sincerely,

**EnviroAssessments, PLLC**

Gary K. Sawyer, P.G.
Principal

Attachments